131st Annual Commencement

CALIFORNIA INSTITUTE OF TECHNOLOGY

Friday, June 13, 2025
10 a.m.

ACADEMIC PROCESSION

Chief Marshal
Elliot Meyerowitz, Ph.D.

Marshals
Nicholas Hutzler, Ph.D. (B.S. '07)
Melany Hunt, Ph.D.
David Chan, Ph.D.
Azita Emami, Ph.D.
Viviana Gradinaru, Ph.D. (B.S. '05)

Faculty Officer
Azita Emami, Ph.D.

Marching Order
Candidates for the Degree of Bachelor of Science
Candidates for the Degree of Master of Science
Candidates for the Degree of Doctor of Philosophy
The Faculty Officers
The Faculty
The Chairs of the Divisions
The Deans
The Vice Provosts
The Provost
The Vice Presidents
The Caltech Alumni Association Executive Officers
The Trustees
The Commencement Speaker
The President
The Chair of the Board of Trustees

PROGRAM

Organ Prelude	Leslie J. Deutsch, Ph.D. (B.S. '76, Ph.D. '80)
Processional	The Caltech Convocation Brass, Percussion, and Organ Ensemble *Glenn D. Price, D.M.A., Conductor*
Presiding	David W. Thompson (M.S. '78) *Chair of the Caltech Board of Trustees*
Commencement Speaker	Walter Massey, Ph.D. *Physicist, Educator, Executive Leader*
Choral Selection "Gaudeamus Igitur" Traditional, Arranged by Dr. Deutsch *(Translation on page 72.)*	The Caltech Glee Club *Nancy Sulahian, M.M., Conductor* Convocation Brass, Percussion, and Organ Ensemble
Conferring of Degrees	Thomas F. Rosenbaum, Ph.D. *President* *Sonja and William Davidow Presidential Chair and Professor of Physics*

Presentation of Candidates for Degrees

For the Degree of Bachelor of Science	Jennifer A. Jahner, Ph.D. *Faculty Dean of Undergraduate Studies*
For the Degree of Master of Science	David C. Chan, Ph.D. *Faculty Dean of Graduate Studies*

For the Degree of Doctor of Philosophy

Biology and Biological Engineering	Paul W. Sternberg, Ph.D. *Division Chair*
Chemistry and Chemical Engineering	Sarah E. Reisman, Ph.D. *Division Chair*
Engineering and Applied Science	Harry A. Atwater, Ph.D. *Division Chair*
Geological and Planetary Sciences	John M. Eiler, Ph.D. *Division Chair*
Humanities and Social Sciences	Tracy K. Dennison, Ph.D. *Division Chair*
Physics, Mathematics and Astronomy	Fiona A. Harrison, Ph.D. *Division Chair*

Announcement of Awards and Concluding Remarks	President Rosenbaum
Alma Mater "Hail CIT" By Manton Barnes (B.S. '21) Arranged by Raymond Burkhart *(The audience may join in; lyrics are on page 74.)*	The Caltech Glee Club, and the Caltech Convocation Brass, Percussion, and Organ Ensemble
Recessional	The Caltech Convocation Brass, Percussion, and Organ Ensemble
Organ Postlude "The Throop Institute March," composed by E. C. Kammermeyer in 1900 for the Throop Institute Guitar and Mandolin Society	Dr. Deutsch

Livestreaming of Caltech's 2025 Commencement ceremony will begin shortly before 10 a.m. on Friday, June 13, at www.caltech.edu.

Follow along with the day's events on Facebook, Instagram, X (Twitter), and Bluesky. Share your photos and join the celebration by using #Caltech2025. (See page 76 for more information.)

All music for the Caltech Commencement arranged by Dr. Leslie Deutsch.

ABOUT THE KEYNOTE SPEAKER

Dr. Walter Massey is chair of the Giant Magellan Telescope Organization, senior adviser to the University of Chicago president, president emeritus of Morehouse College and of the School of the Art Institute of Chicago, former director of the National Science Foundation (NSF), and former director of Argonne National Laboratory.

Raised in the segregated South, Dr. Massey's stellar academic performance in high school earned him a full scholarship to Morehouse College, where he received his B.S. in physics. He studied condensed matter physics at the Washington University in Saint Louis, Missouri, where he obtained his Ph.D.

Dr. Massey conducted postdoctoral research at Argonne National Laboratory before joining the faculty at the University of Illinois at Urbana-Champaign. His research focused on superfluidity in liquid helium and expanded our understanding of neutron stars and informed strategies for detecting dark matter and developing quantum technologies.

He went on to join the faculty of Brown University, eventually becoming dean of the college. He was recruited to become director of Argonne National Laboratory as well as vice president of research and professor of physics at the University of Chicago, which manages Argonne for the Department of Energy.

In 1991, Dr. Massey was appointed director of the NSF. Among his many contributions, he helped convince Congress to invest in the Laser Interferometer Gravitational-wave Observatory (LIGO) when the prospects for detection of gravitational waves were at best remote. LIGO, the largest and most ambitious project ever funded by the NSF, successfully detected cosmic gravitational waves 25 years later.

In 1993, Dr. Massey was appointed provost and vice president for academic affairs for the University of California system. Two years later, he returned to Morehouse College as president, where he served until 2007, before becoming president of the School of the Art Institute of Chicago.

Throughout his career, Dr. Massey fostered cooperation and collaboration between academia, government, and industry. He helped restore funding and recognition of national labs as visionary, scientific research institutions. He opened the doors of opportunity for underserved populations, emphasizing inclusive excellence, access to quality education, mentorship, and the promise of STEM.

ABOUT CALTECH

Caltech, founded in 1891, is a world-renowned science and engineering institute that marshals some of the world's brightest minds and most innovative tools to address fundamental scientific questions and pressing societal challenges.

A Caltech education is notable for its rigorous curriculum, close collaborations with faculty, and small class sizes. Caltech students work toward undergraduate and graduate degrees alongside their intellectual equals in an academic environment that emphasizes interdisciplinary teamwork, critical thinking, mutual support, and a deep understanding of core concepts and principles across fields.

Students graduate from Caltech prepared to become world leaders in science, engineering, academia, industry, and public service. Graduates are well trained in their ability to identify, analyze, and solve challenging problems within and across science and engineering disciplines, and are prepared to apply and communicate their expertise broadly throughout their professional careers.

An independent, privately supported institution, Caltech manages the Jet Propulsion Laboratory (JPL) for NASA. Together with JPL, Caltech is Pasadena's largest employer and a source of programs that benefit the entire region. Caltech also owns and operates the Seismological Laboratory, more than 50 research centers and institutes, and a global network of astronomical observatories, including the Palomar and W. M. Keck observatories. In addition, the Institute co-founded and co-manages the Laser Interferometer Gravitational-wave Observatory (LIGO).

Caltech's faculty, students, postdoctoral scholars, and staff produce transformative breakthroughs in fields ranging from quantum science and engineering to bioinformatics to energy and sustainability. Caltech faculty and alumni have earned national and international recognition, including 48 Nobel Prizes.

We celebrate today the graduates who will earn 619 degrees, including 250 bachelor's degrees, 148 master's degrees, and 221 doctoral degrees, and who will contribute to Caltech's impressive legacy and record of achievement around the world.

CANDIDATES FOR DEGREES

Bachelor of Science

Christopher Jacob Acosta *Dallas, Texas* Computer Science.
Santiago Thomas Adams *Ardsley, New York* Mathematics.
Zofia Ewa Adamska *Warsaw, Poland* Physics and Mathematics.
Riti Agarwal *Bangalore, India* Computer Science with a minor in Information and Data Sciences.
Rohun Agrawal *Cupertino, California* Applied and Computational Mathematics with a minor in Computer Science.
MohammedSaid Alhalimi *Gaza City, Palestine* Mathematics.
Nathaniel Anthony Alvarez† *Downey, California* Computer Science.
Daniel Esteban Amelinez-Robles *Madison, Wisconsin* Mechanical Engineering.
Al Amir *Los Angeles, California* Computer Science.
Allam Imran Amzad *Englewood, New Jersey* Computer Science.
Lucas Victor Ancieta *Oak Park, Illinois* Computer Science with a minor in Environmental Science and Engineering.
Sahithi Ankireddy *Schaumburg, Illinois* Computer Science with a minor in Information and Data Sciences.
Joshua Felix Archibald *Ridge, New York* Electrical Engineering (Computer Engineering).
Sarah Jasmine Arellanes *Duarte, California* Biology.
Cesar I Romero *Denver, Colorado* Mechanical Engineering.
Anika Arora *Fremont, California* Computer Science with a minor in Information and Data Sciences.
Diego Veer Attra *Atlanta, Georgia* Mechanical Engineering.
Carlos D Ayala *Milwaukee, Wisconsin* Astrophysics.
Sahil Azad† *Charlotte, North Carolina* Computer Science and Business, Economics, and Management.
Maria Jose Azcona Baez *Nashua, New Hampshire* Chemical Engineering (Materials).
Pablo Backer Peral *Altadena, California* Electrical Engineering.
Nisha Balaji *San Ramon, California* Computer Science.
Sarah Elizabeth Bass *Livermore, California* Mechanical Engineering.

† *Students whose names are followed by a dagger are close to completion and will receive diplomas at the end of the academic year in which all graduation requirements are met.*

Bachelor of Science continued

Adele Muhoza Basturk *Sunnyvale, California* Physics.
Emily Victoria Baylock *Holmdel, New Jersey* Computer Science.
Logan N. Beharry *Teaneck, New Jersey* Biology.
Abraham Belayneh *Alexandria, Virginia* Computer Science.
Yoyo Benchetrit *Toronto, Canada* Biology with a minor in Chemistry.
Jonathan Edwin Bennett *Breckenridge, Colorado* Geological and Planetary Sciences (Geology) and Business, Economics, and Management.
Jonathan Ross Booker *Burkburnett, Texas* Physics and Computer Science.
Siddharth Boyeneni *Cumming, Georgia* Astrophysics.
John Emerson Brysacz *San Antonio, Texas* Computer Science.
Yiyi Cai *Torrance, California* Electrical Engineering (Intelligent Systems).
Nathan Campos *Lancaster, California* Physics.
Chi Lan Cap *Houston, Texas* Astrophysics.
Maya Iman Caskey *Santa Fe, New Mexico* Computation and Neural Systems.
Joahan Osmar Castaneda Jaimes *Shannon, North Carolina* Astrophysics.
Cloudly Ceen *Oakland, California* Computer Science with a minor in Information and Data Sciences.
Weihong Cen *Newport Beach, California* Computer Science.
Isabela Guadalupe Ceniceros *Placitas, New Mexico* Mechanical Engineering.
Aditi Jayaram Chandrashekar *Ashburn, Virginia* Computer Science with a minor in Information and Data Sciences.
Gabrielle Chang *Hinsdale, Illinois* Computer Science.
Saumya Chauhan *Fremont, California* Computer Science with a minor in Information and Data Sciences.
Albert Sihan Chen *Torrance, California* Computer Science with a minor in Information and Data Sciences.
Chu Xin Cheng *Xiamen, People's Republic of China* Computer Science with a minor in Information and Data Sciences.
Andrew Jason Chiang *Carlsbad, California* Applied and Computational Mathematics with a minor in Computer Science.
Madeline E Christensen *Puyallup, Washington* Planetary Science.
Thomas Patrick Cleveland *Lebanon, Missouri* Mathematics.
Lily Elizabeth Coffin *Farmingdale, California* Mechanical Engineering.
Caitlyn Taylor Hauoli Coloma *Honolulu, Hawaii* Mechanical Engineering.
Christopher David Cox *Jupiter, Florida* Mathematics and Computer Science.
Stephen William D'Aquila *McLean, Virginia* Electrical Engineering.

Bachelor of Science continued

Saren Hagop Daghlian *Altadena, California* Electrical Engineering.

Sophia Rose Dalfonzo *Fair Haven, New Jersey* Bioengineering with a minor in Information and Data Sciences.

Jadelynn Kim Dao *San Jose, California* Computer Science.

Anwesha Das *Kanpur, India* Computation and Neural Systems.

Ethan Zachary Dawn *Taipei, Taiwan (ROC)* Computer Science and Economics with a minor in Information and Data Sciences.

Vinicius de Alcantara Nevoa *Goiania, Brazil* Physics.

Maya de Luis *Cambridge, Massachusetts* Biology.

Catherine Deng *San Jose, California* Electrical Engineering (Intelligent Systems).

Philippe des Boscs *Paris, France* Computer Science and Business, Economics, and Management with a minor in Information and Data Sciences.

Thierno Hamidou Diallo *The Bronx, New York* Computer Science and Independent Studies Program.

Marama Makere Diaz-Asper *Washington, District of Columbia* Bioengineering and Business, Economics, and Management.

Andy Dimnaku *Wellesley, Massachusetts* Computer Science with a minor in Information and Data Sciences.

Kevin Thanh Do *San Diego, California* Computer Science with a minor in Information and Data Sciences.

Julia Elizabeth Donovan *Dallas, Texas* Mechanical Engineering.

James Benjamin Downs *Huntington Beach, California* Applied and Computational Mathematics with a minor in Computer Science.

Aaron M Dubin *Brooklyn, New York* Environmental Science and Engineering (Physics).

Zack Lee Dugue *Rapid City, South Dakota* Computer Science with a minor in Mathematics.

Olivia Nicole Durrett *Huntersville, North Carolina* Astrophysics.

Stephen Egwolor Odomero Gabriel Ebaseh-Onofa† *Edinburg, Texas* Computation and Neural Systems with a minor in Computer Science.

Kathryn Rochelle Edwards *Centennial, Colorado* Mechanical Engineering with a minor in Aerospace Engineering.

Sophia A. Elam *Medford, Oregon* Environmental Science and Engineering (Chemistry) with a minor in Biology.

Emil Alon Esrubilsky *Davie, Florida* Mechanical Engineering.

Elizabeth Julia Field *Charlottesville, Virginia* Physics and Philosophy.

Alejandro Javier Figueredo† *Miami, Florida* Mathematics.

John Pennington Fishel *Timonium, Maryland* Business, Economics, and Management.

Bachelor of Science continued

Jessica Lauren Fox *Roslyn, New York* Physics.
Brandon Tek Frederick *Calabasas, California* Mechanical Engineering.
Mia Catherine Gallo *Highlands Ranch, Colorado* Mechanical Engineering with a minor in Aerospace Engineering.
Jessie Low Gan *San Diego, California* Chemistry (Biochemistry).
Genevieve Isabel Gandara *Irvine, California* Mechanical Engineering.
Ananya Darsan Gangavarapu *Sammamish, Washington* Computer Science.
Julia Zhu Gao *Irvine, California* Computer Science.
Diego Emiliano Garcia *Livingston, California* Mechanical Engineering.
Ethan Matthew Garcia *Austin, Texas* Physics.
Ricardo A Garcia *Broward County, Florida* Mathematics.
Bella Rose Germano *El Paso, Texas* Biology.
Akul Goel *Dallas, Texas* Biology with a minor in Computer Science.
Alexander Tomas Gogola† *Houston, Texas* Mechanical Engineering.
Jacob Reid Goldman *Warrenton, Virginia* Computer Science.
Sascha Layne Goldsmith *Culver City, California* Mechanical Engineering.
Victor Gomez *London, United Kingdom* Physics with a minor in Computer Science.
Wendy Granados Razo *Baldwin Park, California* Chemical Engineering (Sustainability).
Lea Felicia Grohmann *Dingelstädt, Germany* Applied and Computational Mathematics with a minor in Computer Science.
Arushi Gupta *Fremont, California* Computer Science.
Michael Anthony Gutierrez *Sarasota, Florida* Astrophysics.
Jadon Elan Hale *Fort Collins, Colorado* Computation and Neural Systems.
Maven Holst *San Diego, California* Physics.
Benjamin Y. Hong *San Diego, California* Computer Science.
Mila Zoe Hong *Palo Alto, California* Computer Science.
Emily Hu *Vancouver, Canada* Astrophysics with a minor in Computer Science.
Jennifer Yung-Ching Hu *Rockville, Maryland* Computation and Neural Systems.
Andrew Huang *Albany, New York* Computer Science with a minor in Information and Data Sciences.
Maxximo Valenzuela Ibarra *Oklahoma City, Oklahoma* Mechanical Engineering.
Erik Mugambi Imathiu-Jones *Evanston, Illinois* Mathematics.
Makoa Ryan Inciong *Kailua, Hawaii* Mechanical Engineering.
Emma Xueqian Isella *Torrance, California* Biology and Geobiology.
Toyesh Kumar Jayaswal *Shrewsbury, Massachusetts* Mathematics with a minor in Robotics.
Iñigo Daniel Jensen *Broadlands, Virginia* Mechanical Engineering.

Bachelor of Science continued

Jihyun Jeon† *Seoul, Republic of Korea* Computer Science.

Rohan Jha *Gurgaon, India* Computer Science.

Roy Luoyao Jiang *Vancouver, Canada* Computer Science and Business, Economics, and Management with a minor in Neurobiology.

Yunha Jo *Seoul, Republic of Korea* Computer Science.

Jolie W Jones *Atlanta, Georgia* Biology.

Miles Owen Clan Jones *Half Moon Bay, California* Mechanical Engineering with a minor in Aerospace Engineering.

Colin Taejin Kang *Fullerton, California* Applied and Computational Mathematics.

Subin (Rachael) Kim *Jeju, Republic of Korea* Computer Science and Business, Economics, and Management.

Sulekha Kishore *Temple City, California* Computer Science and Political Science.

Anna Grace Kitagawa *Concord, Massachusetts* Computer Science.

Garrett William Knuf *Laguna Niguel, California* Electrical Engineering (Computer Engineering).

Rohan Rajendra Kolhe *Plano, Texas* Computation and Neural Systems.

Thorsen Kael Kristufek *McKinney, Texas* Computer Science.

Eli Kugelsky *New City, New York* Computer Science.

Jun Hyuk Kwak *Palo Alto, California* Computer Science.

Isabella Manalo Kwaterski *Bethesda, Maryland* Mechanical Engineering.

Dereje Paul Lambert *Sandy, Utah* Computer Science.

Alec Lucas Laprevotte *Bethesda, Maryland* Computer Science and Business, Economics, and Management with a minor in Information and Data Sciences.

Jonayet Lavin *New York City, New York* Computer Science.

Natalie Kai-Yun Lee *Westfield, New Jersey* Bioengineering.

Nicole Huimei Lee *Tucson, Arizona* Mechanical Engineering and Business, Economics, and Management.

Trinity Meiyan Lee *Chicago, Illinois* Bioengineering.

Markus Paul Zhi Guang Lendermann *Republic of Singapore* Computer Science.

Michelle Li *New York, New York* Computer Science with a minor in Information and Data Sciences.

Sarah Yuan Ni Liaw *Petaling Jaya, Malaysia* Computer Science.

Jason Lin *Los Angeles, California* Bioengineering.

Erik Andrew Lindeman *La Crescenta, California* Physics.

Alycia Lauryce Lipscomb *Lindenwold, New Jersey* Applied and Computational Mathematics.

Miguel Omar Liu-Schiaffini *Austin, Texas* Computer Science.

Bachelor of Science continued

Mabel Lu† *Milpitas, California* Mechanical Engineering.

Lana Carmen Lubecke *Honolulu, Hawaii* Applied and Computational Mathematics.

Juan Simon Luchsinger *Palmetto Bay, Florida* Mechanical Engineering.

Benjamin R Lugo *Mission, Texas* Mechanical Engineering.

Enoch Chunlok Luk *Saratoga, California* Computer Science.

America Luna Herrera *Antelope Acres, California* Mechanical Engineering.

Antônio Victor Machado de Oliveira *Vitória, Brazil* Electrical Engineering.

Thomas Ian MacLean *Redding, California* Mathematics with minors in Astrophysics and Aerospace Engineering.

Georgia May Malueg *Miami, Florida* Computer Science and Business, Economics, and Management with a minor in Information and Data Sciences.

Michael Nicholas Manta *New York City, New York* Mathematics.

Katherine Ann Marquis *Tewksbury, Massachusetts* Applied and Computational Mathematics.

Haydn Campbell Maust *West Linn, Oregon* Mathematics.

Cameron Michael McNamee *Great Falls, Montana* Mathematics.

Aramis Josephine Mendoza *Rancho Cucamonga, California* Mechanical Engineering with a minor in Aerospace Engineering.

Lark Mendoza *Longmont, Colorado* Computer Science.

Stephanie Giselle Mendoza *Rialto, California* Mechanical Engineering.

Mira Petra Menezes *Portland, Oregon* Physics and Geological and Planetary Sciences (Geophysics).

Briana Alexandria Mercado *Downey, California* Mechanical Engineering.

Caden Joseph Mikkelsen *Phoenix, Arizona* Physics and Mathematics.

Julian Edward Millan *Mechanicsville, Virginia* Mechanical Engineering.

Kimberly Rocio Miranda Reyes *Redwood City, California* Mechanical Engineering.

Christian Miranda† *Whittier, California* Electrical Engineering (Computer Engineering) with a minor in Computer Science.

Maxwell Joseph Montemayor *Arcadia, California* Computation and Neural Systems.

Gael Moran *El Paso, Texas* Computer Science.

Ramona Wanjiru Murugu *Nairobi, Kenya* Chemical Engineering (Sustainability).

Patricia Anne Sulit Mutia† *Glen Allen, Virginia* Computer Science.

Kenji Isaiah Nakagawa *Lincoln, Nebraska* Mathematics and Computer Science.

Andres Nava *Bethesda, Maryland* Physics.

Julian Enrique Navarro Rodriguez *San Juan, Puerto Rico* Computer Science with a minor in Information and Data Sciences.

Paulina Maria Naydenkov *Oxnard, California* Chemical Engineering (Biomolecular).

Bachelor of Science continued

Nathan A Ng *Santa Clara, California* Mechanical Engineering.

Randy Christopher Ngo† *Denver, Colorado* Computer Science.

Thandolwenkosi Barbara Nkala *Charlotte, North Carolina* Mechanical Engineering.

Emeka TJ Nkurumeh *Oklahoma City, Oklahoma* Computer Science.

Cecilia Courtney Noble *Moorpark, California* Computer Science.

Sangwon Noh *Auburn, Alabama* Geological and Planetary Sciences.

Dilichi Obichukwu Nwankwo *Silver Spring, Maryland* Computer Science with a minor in Philosophy.

Jayden Desaca Nyamiaka *Scotch Plains, New Jersey* Computer Science and Business, Economics, and Management.

Max A Oberg† *The Woodlands, Texas* Mechanical Engineering with a minor in History.

Katherine Elizabeth Ochoa† *Culver City, California* Chemistry.

Favour Eghonghon Okodogbe *Amityville, New York* Computer Science with a minor in Information and Data Sciences.

George Louis Ore† *La Puente, California* Electrical Engineering (Computer Engineering).

Alejandro Ortega Grisso *Mexico City, Mexico* Applied and Computational Mathematics with a minor in Computer Science.

Rucheng Pan *Brookfield, Wisconsin* Computation and Neural Systems with a minor in Biology.

Joon Young Park *Seoul, Republic of Korea* Computer Science and Business, Economics, and Management.

Deepro Fazlul Pasha *Fresno, California* Electrical Engineering with a minor in Computer Science.

Eshani Jatin Patel *Cupertino, California* Computer Science with a minor in Information and Data Sciences.

Payal Nital Patel *Cumming, Georgia* Mechanical Engineering.

Eric Paul *Fresno, California* Mathematics.

Jean-Sebastien Paul *London, United Kingdom* Computer Science and Biology.

Dominic Minh Phung *San Diego, California* Computer Science.

Tessa Claire Pierce *Newport, Washington* Biology.

Juni Young Hee Polansky *Baltimore, Maryland* Bioengineering with a minor in English.

Sophie Louise Oliveira Polidoro *Austin, Texas* Mechanical Engineering with a minor in History and Philosophy of Science.

Chris Pope† *Houston, Texas* Electrical Engineering (Medical Engineering).

Evan Ross Portnoi *Short Hills, New Jersey* Astrophysics.

Kemal Pulungan *Troy, New York* Electrical Engineering.

Bachelor of Science continued

Isabelle Marie Ragheb *Rockville, Maryland* Mechanical Engineering.
Tarunraj Ramgulam *Kaukauna, Wisconsin* Applied and Computational Mathematics.
Lillian Rajsavong Randall *Astoria, Oregon* Geochemistry.
Sara Razavi† *Fairfax, Virginia* Mechanical Engineering with a minor in Biology.
Zane Samuel Travis John Reeves *Toledo, Ohio* Computer Science.
Juan M Renteria *Chicago, Illinois* Mechanical Engineering.
Manuel Antonio Rodriguez *Miami, Florida* Computer Science.
Alexandra Diane Rolfness *Scottsdale, Arizona* Computer Science.
Skye Jillian Ruedas *San Dimas, California* Computer Science.
Sagan Gray Russ *Bellevue, Washington* Bioengineering with a minor in Computer Science.
Ramzi Saber† *Casablanca, Morocco* Astrophysics.
Josh Arthur Saha† *Rye, New York* Physics.
Alec Z Sandroni *Philadelphia, Pennsylvania* Mathematics and Economics.
Anagha Satish *Redlands, California* Computer Science with a minor in Information and Data Sciences.
Shelby Anne Scott *San Jose, California* Mechanical Engineering and Business, Economics, and Management.
Purvi Sehgal *Phoenix, Arizona* Computer Science.
Sydney Isabella Serratos *Boerne, Texas* Business, Economics, and Management with a minor in Biology.
Domani S Sharkey† *Downers Grove, Illinois* Physics.
Joseph Ricardo Sheeran *Kansas City, Kansas* Physics with a minor in Mathematics.
Cason Brett Shepard *Vancouver, Washington* Computer Science.
Cole Ke'alohi Shimokaji *Hacienda Heights, California* Physics.
Sophia Marie Slora *Wenatchee, Washington* Biology.
Sam Benjamin Small *Ringwood, United Kingdom* Bioengineering with a minor in Chemistry.
Alemayouh Haile Snyder *Pasadena, California* Materials Science.
Jennifer Solgaard *Stanford, California* Electrical Engineering with a minor in English.
Michael Arlandres Matsuo Sowell *Clarksville, Tennessee* Planetary Science.
Leyla Sözen-Kohl *London, United Kingdom* Mathematics.
Edward Earl Speer *Austin, Texas* Computer Science and Philosophy.
Aditya Raghav Srinivasan *Pittsford, New York* Physics.
Shrey Srivastava *Redmond, Washington* Computer Science.
Xiaohe Sun *Ningbo, People's Republic of China* Bioengineering.
Bharathan Sundar *Southborough, Massachusetts* Mathematics.

Bachelor of Science continued

Avirath Sundaresan *Menlo Park, California* Computer Science with a minor in Information and Data Sciences.

Kai Svenson *Kensington, Maryland* Physics.

Sofia Riley Syed *Austin, Texas* Mechanical Engineering with a minor in Aerospace Engineering.

Asmat Kaur Taunque *Chandigarh, India* Computer Science.

Laurent Andrea Torres Sauceda† *San Antonio, Texas* Computation and Neural Systems.

Matthew Wade Torres II *Miami, Florida* Bioengineering with a minor in Neurobiology.

Kaushik Sai Tota *Sunnyvale, California* Computer Science and Business, Economics, and Management with a minor in Environmental Science and Engineering.

Maxwell Sebastian Vale† *Staten Island, New York* Mechanical Engineering.

Avyay Varadarajan *Fremont, California* Computer Science.

Ayush Anitej Varshney *Potomac, Maryland* Computer Science and Business, Economics, and Management.

Mariamma Vazhaeparambil *Saratoga, California* Computer Science and Business, Economics, and Management with a minor in Information and Data Sciences.

Alejandra Paola Vazquez-Yanez *Los Angeles, California* Mechanical Engineering.

Sophia Claire Vera *Palo Alto, California* Computation and Neural Systems.

Sydney Charbonneau Vernon *Issaquah, Washington* Applied and Computational Mathematics.

Kodie Lee Vondra *Livingston, Montana* Bioengineering with a minor in Neurobiology.

Bryan Mickey Wang *West Covina, California* Chemical Engineering (Computational).

Evan Z Wang *Rockville, Maryland* Computer Science.

Sylvia X Wang *Pasadena, California* Electrical Engineering.

Aija J Washington *Austell, Georgia* Mechanical Engineering with a minor in Neurobiology.

Ethan JuYoung Wilk *Scottsdale, Arizona* Applied and Computational Mathematics.

Grace Evelyn Wilson *Alpharetta, Georgia* Biology.

Ryan Benjamin Wong *Chicago, Illinois* Computer Science with a minor in Information and Data Sciences.

Riley Mitchell Wood *Richmond, Virginia* Business, Economics, and Management and Political Science with a minor in Information and Data Sciences.

Sophia Jingyi Wu *Newton, Massachusetts* Bioengineering.

Alan (Yulun) Wu *Shanghai, People's Republic of China* Computer Science.

Katherine Xu *San Jose, California* Computer Science and Business, Economics, and Management.

Allen Rao Yang *San Diego, California* Applied and Computational Mathematics with a minor in Computer Science.

Zhe Yang *Beijing, People's Republic of China* Physics.

Bachelor of Science *continued*

Zitian Ye *Beijing, People's Republic of China* Physics.
Jonah Kaiana Yoshida *Honolulu, Hawaii* Mathematics.
Alicia Xian Zhang *Livermore, California* Computer Science.
Charlotte Linn Zhang *San Diego, California* Biology.
Evan Jitang Zhang *Great Falls, Virginia* Computer Science.
Heyi Alina Zhang *Tucker, Georgia* Computer Science and Economics.
Hongyu Zhang *Gujiao, People's Republic of China* Physics.
Leo Zhang *Hialeah, Florida* Computer Science.
Aaron Zhao *Arcadia, California* Computer Science and Business, Economics, and Management.
Sean Yuxiang Zheng *San Marino, California* Computer Science and Business, Economics, and Management.
Zhiyi (Miranda) Zheng *Shanghai, People's Republic of China* Physics.
Zhonghe Zheng *Los Gatos, California* Computer Science with a minor in Robotics.
Luke Frederick Zhou *Chino, California* Chemistry.

Master of Science

Akshit Agarwal *(Electrical Engineering)* B.S., University of California, San Diego 2023.

Jihoon Ahn *(Mechanical Engineering)* B.S., Hanyang University 2019.

Olivia Danielle Nicole Alcabes *(Environmental Science and Engineering)* B.A., The University of Chicago 2021.

Omid Aligholamioskooee *(Electrical Engineering)* M.Sc., University of Calgary 2022.

Vishal Anantharaman *(Mechanical Engineering)* B.S., University of California, Los Angeles 2023.

Nicolas Stephan Anderson *(Geology)* B.A., University of California, Berkeley 2022.

Daniil Asafov *(Physics)* B.S., National Research University Higher School of Economics 2023.

Gilbert Bahati *(Mechanical Engineering)* B.S., University of California, Berkeley 2020.

Eli Nathaniel Baum *(Applied Physics)* B.S., University of California, Davis 2022.

Soumyadeep Bhattacharjee *(Astrophysics)* B.Sc., Indian Institute of Science 2023.

Vine Irene Blankenship *(Environmental Science and Engineering)* B.S., University of California, San Diego 2023.

Mathilde Bonnetier *(Mechanical Engineering)* M.S., École Polytechnique 2023.

Alkım Berke Bozkurt *(Electrical Engineering)* B.Sc., Middle East Technical University 2020.

Benjamin Rowlain Breer *(Mechanical Engineering)* B.S., Georgia Institute of Technology 2022; M.S., 2023.

Mageean Rose Brown *(Aeronautics)* Sc.B., Brown University 2024.

Enzo Rolando Carrascal Marquez *(Geology)* B.S., Arizona State University 2022.

Joshua J. Chaj Ulloa *(Medical Engineering)* B.S., The University of Texas at San Antonio 2023.

Shu Yuan Chang *(Electrical Engineering)* B.S., National Taiwan University 2022.

Alexander Chen *(Electrical Engineering)* B.S., University of California, Berkeley 2024.

Boyuan Chen *(Chemical Engineering)* B.S., Columbia University 2023.

Ivy Iw Chen *(Applied Physics)* B.S., Harvey Mudd College 2020.

Liang-Wei Chen *(Medical Engineering)* B.S., National Cheng Kung University 2020; M.S., National Yang Ming Chiao Tung University 2022.

William David Chen *(Electrical Engineering)* B.A., M.S., University of Pennsylvania 2022.

William Ethan Chen *(Mechanical Engineering)* B.Che., University of Minnesota, Twin Cities 2023.

Yuan Chen *(Applied Physics)* M.Sci., Imperial College London 2023.

Han-Yi Cheng *(Electrical Engineering)* B.S., National Yang Ming Chiao Tung University 2023.

Yuen Man Kathy Cheung *(Neurobiology)* B.Sc., The Hong Kong University of Science and Technology 2018.

Kellan Dunton Colburn *(Applied Physics)* B.S., University of California, Santa Barbara 2021.

Master of Science continued

Gabriela M Corea *(Mechanical Engineering)* S.B., Massachusetts Institute of Technology 2023.

Maximo Cravero Baraja *(Mechanical Engineering)* B.Sc., University of Technology Delft 2019; M.Sc., Ecole Polytechnique Federale de Lausanne 2023.

Adrian De la Rocha Galán *(Applied Physics)* B.S., The University of Texas at El Paso 2023.

Ishaan Joshan Dev *(Chemical Engineering)* B.S., University of California, Berkeley 2019.

Yuanze Ding *(Physics)* B.S., Wuhan University 2022.

Zhenyu Dong *(Electrical Engineering)* B.S., Zhejiang University 2019; M.S., 2022.

Reiley John Dorrian *(Applied Physics)* B.A., Cornell University 2023.

Yufeng Du *(Physics)* B.S., University of Illinois at Urbana-Champaign 2020.

Emily Rose Dunn *(Chemical Engineering)* B.S., University of California, Los Angeles 2022.

Ihab Adel Elmasri *(Chemical Engineering)* A.A., Pasadena City College 2020; B.S., University of California, Berkeley 2022.

Christiana Erendira *(Electrical Engineering)* B.S., California State Polytechnic University, Pomona 2024.

Anahita Eshghetorki *(Mechanical Engineering)* B.S., University of Minnesota, Twin Cities 2023.

Aman Imad Eujayl *(Mechanical Engineering)* B.S., Rice University 2023.

Mariya Ezzy *(Materials Science)* B.Tech., Indian Institute of Technology Delhi 2023.

Shriya Anurati Fruitwala *(Environmental Science and Engineering)* B.S., Haverford College 2023.

Jesus Marcelo Galeana *(Chemistry)* A.S., College of the Sequoias 2020; B.S., University of California, Irvine 2022.

Kevin Douglas Gauld *(Electrical Engineering)* B.S., California Institute of Technology 2024.

Emily Claire Geyman *(Geology)* B.A., Princeton University 2019.

Mingyao Guo *(Physics)* B.S., University of Science and Technology of China 2021.

Zhanyu Guo *(Electrical Engineering)* B.Eng., Southwest Jiaotong University 2023; B.Eng., University of Leeds 2023.

Aracely Gutierrez-Rodriguez *(Physics)* B.S., California State University, Northridge 2020.

Mingzhe Han *(Electrical Engineering)* B.S., University of Rochester 2024.

Luke Blake Handley *(Astrophysics)* B.S., University of California, Los Angeles 2023.

Sophie Hillcoat *(Aeronautics)* B.A.Sc., University of Waterloo 2023; M.A.Sc., 2024.

Sophie Rose Hourihane *(Physics)* B.S., University of Michigan, Ann Arbor 2020.

Yu Xi Huang *(Electrical Engineering)* B.A., Washington University in St. Louis 2021.

Tiffany Hung *(Chemistry)* A.A., Emory University 2020; B.S., 2021.

Ocheanya Igomu *(Bioengineering)* B.Sc., Illinois Wesleyan University 2019.

Davis Landen Jackson *(Electrical Engineering)* B.S.E., Rice University 2024.

Master of Science *continued*

Huma Jafree *(Physics)* B.S., Randolph-Macon College 2022.

Peng Jin *(Medical Engineering)* B.S., Huazhong University of Science and Technology 2020; M.Sc., Zhejiang University 2023.

Pranav Joshi *(Electrical Engineering)* B.Tech., Indian Institute of Technology Kharagpur 2021.

Beom Seok Kang *(Chemical Engineering)* M.S., Imperial College London 2021.

Hojjat Kaveh *(Applied Mechanics)* B.Sc., Amirkabir University of Technology 2016; M.Sc., Sharif University of Technology 2018.

Abdullah Yusuf Kavranoglu *(Electrical Engineering)* B.Sc., Istanbul Technical University 2023.

Abhishek Kejriwal *(Applied Physics)* B.Tech., M.Tech., Indian Institute of Technology Bombay 2023.

Rumi Muhammad Abdur-Raheem Khan *(Social Science)* B.A., Harvard College 2021.

Joonhwi Kim *(Physics)* B.S., Seoul National University 2021.

Sungchan Kim *(Chemical Engineering)* B.S., Seoul National University 2023.

Chenxi Kong *(Geophysics)* B.S., University of Science and Technology of China 2023.

Jaeha Lee *(Physics)* B.S., Seoul National University 2020.

Sunho Lee *(Medical Engineering)* B.S., Korea Advanced Institute of Science and Technology 2020.

Yerim Lee *(Medical Engineering)* B.Eng., National University of Singapore 2022.

Delina M. Levine *(Astrophysics)* B.S., University of Maryland, College Park 2023.

Linxuan Li *(Geophysics)* B.S., Wuhan University 2023.

Mingshu Liang *(Electrical Engineering)* B.S., Zhejiang University 2019.

Chun-Ju Lin *(Electrical Engineering)* B.S., National Tsing Hua University 2023.

Zeren Lin *(Physics)* B.S., Peking University 2016.

Juliette Elise Lipson *(Environmental Science and Engineering)* B.A., University of Pennsylvania 2023.

Erin Liu *(Applied Physics)* B.S., Duke University 2023.

Junning Liu *(Mechanical Engineering)* B.S., Peking University 2023.

Lunjun Liu *(Physics)* B.A., Illinois Wesleyan University 2017.

Ruixiao Liu *(Medical Engineering)* B.S., University of California, San Diego 2023.

Tianyi Liu *(Electrical Engineering)* B.S., North Carolina State University 2024.

Yincheng Liu *(Applied Physics)* B.A., University of Oxford 2023.

Forrest Cappy McCann *(Geochemistry)* B.A., University of California, Berkeley 2023.

Aline Milach Teixeira *(Chemical Engineering)* B.S., Iowa State University 2023.

Naiara Ainoha Munich *(Chemical Engineering)* B.A., Barnard College 2023.

Jihoon Oh *(Chemical Engineering)* B.S., Seoul National University 2023.

Master of Science *continued*

Joshua Olick-Gibson *(Electrical Engineering)* B.S., Washington University in St. Louis 2018.

Michael Naresh Pacocha *(Materials Science)* B.S., Georgia Institute of Technology 2022.

William Austin Pajak *(Applied Physics)* B.S., The University of Texas at Austin 2023.

Mohamadamin Panahandeh *(Electrical Engineering)* B.Sc., Sharif University of Technology 2023.

Gunhee Park *(Applied Physics)* B.A., M.Sci., University of Cambridge 2020.

Wesley Devan Patel *(Chemical Engineering)* B.S., Lehigh University 2023.

Adele Payman Breer *(Applied Physics)* B.S., Georgia Institute of Technology 2023.

Siddharth Premnath *(Chemical Engineering)* B.S., University of Minnesota, Twin Cities 2023.

Heriniaina Fenotoky Rajaoberison *(Computing and Mathematical Sciences)* B.Sc., University of Rochester 2022.

Joshua Tyler Ramos *(Space Engineering)* B.S., California Polytechnic State University, San Luis Obispo 2024.

Suraj Sarvesha Samaga *(Electrical Engineering)* B.Tech., Indian Institute of Technology Bombay 2023.

Isabel Sophia Sands *(Physics)* B.S., Yale University 2021.

Aniket Sanghi *(Astrophysics)* B.S., The University of Texas at Austin 2023.

Harshda Saxena *(Astrophysics)* B.Tech., Indian Institute of Technology Bombay 2023.

Parth S Shah *(Electrical Engineering)* B.Tech., M.Tech., Indian Institute of Technology Madras 2022.

Manvendra Sharma *(Electrical Engineering)* B.Tech., Indian Institute of Space Science and Technology 2024.

Aditya Bhaskar Shedge *(Mechanical Engineering)* B.S., University of Illinois at Urbana-Champaign 2019.

Maximilian H. Shen *(Electrical Engineering)* B.S., University of California, Santa Barbara 2023.

Xinyi Shen *(Chemical Engineering)* B.S., The Johns Hopkins University 2022.

Qian Shi *(Geophysics)* B.S., University of Science and Technology of China 2022.

Zahra Sophia Shivji *(Chemical Engineering)* B.S., Georgia Institute of Technology 2022.

Rajani Shrestha *(Geophysics)* B.Sc., Tribhuvan University 2020; M.S., University of Delaware 2023.

Geraldine Isamari Silva Galindo *(Medical Engineering)* B.S., Instituto Politécnico Nacional 2018; M.S., 2021.

Chi Wang Siu *(Applied Physics)* B.Sc., The Hong Kong University of Science and Technology 2023.

Hon Kit Jason Siu *(Space Engineering)* B.S., University of California, Berkeley 2024.

Master of Science continued

Natan Spear *(Materials Science)* B.S., Northwestern University 2023.

Christopher Jenkins Stewart *(Chemical Engineering)* B.S., United States Military Academy at West Point 2016.

Ariel Ann Struzyk *(Chemical Engineering)* B.S., Cornell University 2023.

Sundar Raam Swaminathan *(Chemical Engineering)* B.Tech., Indian Institute of Technology Madras 2023.

Rock Christian Ventura Tomas *(Electrical Engineering)* B.S., University of the Philippines Los Baños 2018.

Elena Daria Urquiola *(Chemistry)* B.S., Yale University 2023.

Daniel Howard Van Beveren *(Physics)* B.S., Haverford College 2020.

Teja Venkatesa Perumal *(Chemistry)* B.Tech., National Institute of Technology, Tiruchirappalli 2021; M.Phil., University of Cambridge 2022.

Tristan Anthony Villanueva *(Mechanical Engineering)* B.S., University of California, Berkeley 2023.

Fan-Lin Wang *(Electrical Engineering)* B.S.E., National Taiwan University 2022.

Hengyu Wang *(Electrical Engineering)* B.A., University of Oxford 2023.

Qiren Wang *(Environmental Science and Engineering)* B.S., Peking University 2023.

Shengsheng Wang *(Electrical Engineering)* B.S., University of Illinois at Urbana-Champaign 2024.

Yixuan Wang *(Applied and Computational Mathematics)* B.S., Peking University 2020.

Zongyuan Wang *(Physics)* B.S., University of Illinois at Urbana-Champaign 2019.

Tharani Ransimala Weerasooriya *(Social Science)* B.S., The University of Queensland 2018.

Guillaume Wegmueller *(Social Science)* B.A., University of Geneva 2020.

Yunfei Wen *(Physics)* B.Math., University of Waterloo 2022.

Blake Werner *(Mechanical Engineering)* B.S., University of California, Berkeley 2023.

Bonan Wu *(Electrical Engineering)* B.Eng., Tsinghua University 2023.

Mengcheng Wu *(Chemistry)* B.S., University of Wisconsin-Madison 2020.

Zihui Wu *(Electrical Engineering)* B.S., Washington University in St. Louis 2020.

Yixin Xu *(Medical Engineering)* M.Eng., University of Oxford 2023.

Yixin Xu *(Physics)* B.S., Sun Yat-sen University 2020.

Zikai Xu *(Chemistry)* B.S., Fudan University 2023.

Keyang Yang *(Mechanical Engineering)* B.E., Tsinghua University 2023.

Jia Yao *(Physics)* B.S., Rice University 2019.

Rahul Kumar Yerra *(Space Engineering)* B.Tech., Indian Institute of Space Science and Technology 2024.

Master of Science *continued*

Sol Bin Yun *(Astrophysics)* B.S., University of Michigan, Ann Arbor 2023.
Thomas Zacharias *(Electrical Engineering)* B.Sc., Tel Aviv University 2019; M.Sc., 2020.
Chi Zhang *(Chemistry)* B.S., University of Science and Technology of China 2023.
Sarah Zhang *(Environmental Science and Engineering)* B.A., B.S., University of California, Berkeley 2023.
Tianzheng Zhang *(Chemistry)* B.S., University of Illinois at Urbana-Champaign 2022.
Yiran Zhang *(Physics)* B.Sc., Shanghai Jiao Tong University 2018.
Shi Zhao *(Electrical Engineering)* B.S., Peking University 2023.
Selina Zhou *(Electrical Engineering)* B.S., California Institute of Technology 2022.

Doctor of Philosophy

DIVISION OF BIOLOGY AND BIOLOGICAL ENGINEERING

Paulomi Bhattacharya *(Bioengineering)* S.B., Massachusetts Institute of Technology 2017.
Thesis: RNA-Mediated Toxicity in Neurodegeneration: The Mechanistic Role of The C9ORF72 Repeat Expansion in ALS Molecular Pathogenesis.

Arun Chakravorty *(Systems Biology)* B.A., Cornell University 2016.
Thesis: Bridging Space and Time: Resolving the Temporal Dynamics of the Seminiferous Epithelial Cycle Using Spatial Transcriptomics.

Gerard Michael Coughlin *(Neurobiology)* B.S., University of Calgary 2013; B.A., 2016.
Thesis: Spatial Biology Tools to Accelerate and Refine Adeno-Associated Virus Engineering and Application.

Hristos Spiridonos Courellis *(Bioengineering)* B.S., University of California, San Diego 2015; M.S., 2019.
Thesis: A Study on the Content, Format, and Implementation of Neural Representations That Underlie Flexible Human Cognition.

Samuel Ryan Davidson *(Bioengineering)* B.S., Northwestern University 2018.
Thesis: Localized Catalytic DNA Circuits for Integrated Information Processing in Molecular Machines.

Meichen Fang *(Bioengineering with a minor in Applied and Computational Mathematics)* B.S., Peking University 2019.
Thesis: A Biophysical Approach to Normalization and Trajectory Inference in Single-Cell RNA Sequencing Data Analysis.

Emanuel Flores Bautista *(Biochemistry and Molecular Biophysics with a minor in Applied and Computational Mathematics)* B.Sc., Universidad Autónoma de Yucatán 2019.
Thesis: The Topology of Cellular Ontogeny.

Sarah Knox Gillespie *(Molecular Biology and Biochemistry)* B.A., Washington University in St. Louis; M.S., California Institute of Technology.
Thesis: Structure-Guided SCHEMA Recombination of VRC01-Class Antibodies for Reduced Polyreactivity.

Matteo Michele Guareschi *(Bioengineering)* B.S., University of Pavia 2017; Magister, Politecnico di Torino 2019.
Thesis: Enriching Architectures for Biosensing and Motor-Filament Systems Through the Programmability of DNA.

Masami Hazu *(Molecular Biology and Biochemistry)* B.Sc., Nagoya University 2017; M.Sc., University of Sheffield 2019.
Thesis: Mechanistic Studies of Membrane Protein Biogenesis at the ER and Mitochondria.

Doctor of Philosophy *continued*

Drew Daniel Honson *(Molecular Biology and Biochemistry)* B.S., University of Minnesota, Twin Cities 2017.

Thesis: Development and Application of Proteomic and Genomic Methods in RNA Biology.

Kelly Marie Kadlec *(Neurobiology)* B.S., Virginia Polytechnic Institute and State University 2018.

Thesis: Distinct Patterns of Overlapping Neural Representation of Sensorimotor Variables in Primary and Associative Motor Areas: Insights from Chronic Intracortical Recordings in the Human Brain.

Neehar Kondapaneni *(Computation and Neural Systems)* B.Sc., University of California, San Diego 2017.

Thesis: Aligning and Comparing Vision Representations to Improve Understanding and Performance.

Francesco Lanfranchi *(Computation and Neural Systems)* M.S., Università Commerciale Luigi Bocconi 2015.

Thesis: A Multispecies Perspective on the Evolution of Form Vision.

Elin Maria Larsson *(Bioengineering)* M.S., Lunds Universitet 2019.

Thesis: Domestication of Environmental Bacteria for Biosensing Applications.

Can Li *(Biology)* B.S., University of Science and Technology of China 2009.

Thesis: Gene Regulatory Analysis of the Developing Enteric Nervous System of Zebrafish *(Danio rerio)*.

Francesca-Zhoufan Li *(Bioengineering)* B.S., University of California, Berkeley 2019.

Thesis: Evaluation of the Generalizability of Machine Learning-Assisted Protein Engineering Methods.

Rebekah Kiana Loving Ngo *(Systems Biology)* B.A./B.S., University of Hawaii at Hilo 2019.

Thesis: Methods for Long Read RNA-seq Transcriptomics.

Andrew Lu *(Systems Biology)* B.A., University of California, Berkeley 2017.

Thesis: Engineered Protein Circuits for Cancer Therapy.

Mason Benjamin McGill *(Computation and Neural Systems)* Sc.B., Brown University 2013.

Thesis: Visual Systems and the Forces that Shape Them.

Aditya Nair *(Computation and Neural Systems)* B.Sc., National University of Singapore 2018.

Thesis: The Neural Computation of Internal Affective States.

Thomas Houser Naragon *(Chemistry)* B.S., Trinity College 2017.

Thesis: Cuticular Hydrocarbons in Myrmecophiles are a Mechanism of Symbiotic Entrenchment.

Doctor of Philosophy *continued*

Aditi Kalpagam Narayanan *(Microbiology)* B.S., University of California, Berkeley 2014.
Thesis: Diversity, Activity, and Adaptations of Phage Communities in Anoxic Hydrocarbon-Rich Marine Sediments.

Noah Evan Robinson *(Bioengineering)* B.S., Saint Michael's College 2021.
Thesis: Construction of Long, Complex, and Diverse DNA Sequences.

Shirin Shivaei *(Bioengineering)* S.B., Massachusetts Institute of Technology 2017; S.M., 2018.
Thesis: A Viral Toolkit for Ultrasound Imaging of Cellular Activity and Gene Expression.

Delaney Kalcey Sullivan *(Biology)* B.S., Stanford University 2016; M.S., 2019.
Thesis: Software, Tools, and Methods Development for Single-Cell Transcriptomics.

Hugo Alexander Urrutia *(Developmental Biology)* B.S., California State University, Los Angeles 2011; A.A., Pierce College 2013; M.S., California State University, Los Angeles 2018.
Thesis: Understanding Cessation of Neural Crest Migration and Onset of Gangliogenesis.

Alexander Viloria Winnett *(Biology)* B.S., University of Massachusetts Boston 2016.
Thesis: Quantitative Nucleic Acid Measurements Inform Strategies to Mitigate Viral Outbreaks.

Zitong Wang *(Immunology with a minor in Applied and Computational Mathematics)* B.Sc., McMaster University 2017.
Thesis: Theoretical and Computational Analysis of Cell Migration in Complex Tissue Environments.

Yujing Yang *(Biology)* Bachelor Medicine, Sichuan University 2015.
Thesis: Exploring Cell Diversity in Complex Tissues through Spatial Genomics and Spatial Transcriptomics.

Zheng Yang *(Bioengineering)* B.S., Rensselaer Polytechnic Institute 2018; S.M., Massachusetts Institute of Technology 2020.
Thesis: SpLacZ-MERCS-Coupled CRISPRi Screening Identifies Novel Mitochondria-ER Contact Sites Regulators.

DIVISION OF CHEMISTRY AND CHEMICAL ENGINEERING

Alexandra Nichole Barlow *(Biochemistry and Molecular Biophysics)* B.S., University of Massachusetts Amherst 2017.
Thesis: The Biochemical and Structural Basis of Get3d's Role in Photosynthesis.

Xiaotian Bi *(Chemistry)* B.S., Peking University 2019.
Thesis: Functional Stimulated Raman Imaging for Quantitative Cell Biology with Small Bioorthogonal Tags.

Emily Boyd *(Chemistry)* B.S., University of Kansas 2019.
Thesis: Reductive Samarium Catalysis Enabled By A Thermochemical Roadmap.

Doctor of Philosophy *continued*

Dorian Wayne Bruch *(Chemical Engineering with a minor in Applied and Computational Mathematics)* B.S., University of California, Santa Barbara 2019.
Thesis: Theoretical Modeling of Interactions Between Electrolytes and Surfaces.

Hyungdo Cho *(Chemistry)* B.S., Seoul National University 2018.
Thesis: Development of Photoinduced Copper-Catalyzed Amination of Alkyl Electrophiles: Synthesis and Mechanism.

Katsuya Lex Colón *(Chemistry)* B.S., The University of North Carolina at Greensboro 2018; M.S., California Institute of Technology 2023.
Thesis: *In situ* Signal Amplification for Spatial Transcriptomics Using Programmable DNA Assemblies.

Kaylin Nicole Flesch *(Chemistry)* B.S., University of Wisconsin-Madison 2019.
Thesis: Asymmetric Transformations from Palladium Enolates and Progress Toward the Total Synthesis of Hypermoin A.

Alec Gregory Glisman *(Chemical Engineering)* B.S., University of California, Berkeley 2019; M.S., California Institute of Technology 2022.
Thesis: Part I: Multi-Valent Ion Effects on Polyelectrolyte Structure and Thermodynamics & Part II: Hydrodynamic Self-Propulsion.

Marta Gonzalvo i Ulla *(Chemistry)* B.S., Universitat Autònoma de Barcelona 2018.
Thesis: Computational Methods for Nucleic Acid Structure Prediction and G Protein-Coupled Receptor Mechanism Investigation.

Tianyi He *(Chemistry)* B.A., Colgate University 2019.
Thesis: Synthesis and Spectroscopy of Open-Shell Complexes Bearing Unusual M-E (E = N, C) Bonding Motifs and Synthesis of Novel Weakly-Coordinating Anions with Applications in Coordination Chemistry and Electrochemistry.

Elliot Frederick Hicks *(Chemistry)* B.S., Emory University 2020.
Thesis: Stereoselective Synthesis of α- and ß-Functionalized Carbonyl Derivatives: Allylic Alkylation of Dialkyl Malonates, Total Synthesis of Hunterine A, and Progress Toward the Synthesis of Kuroshine A.

Christian Marinelli Johansen *(Chemistry)* B.A., University of Cambridge 2017.
Thesis: Catalytic Proton-Coupled Reductions of Dinitrogen and Cyanide.

Nathanael Parker Kazmierczak *(Chemistry)* B.S., Calvin University 2020.
Thesis: Illuminating Molecular Spin Relaxation Mechanisms through Ligand Field Theory and Physical Inorganic Spectroscopy.

Jin Mo Koo *(Chemical Engineering)* B.S., The Johns Hopkins University 2016.
Thesis: Probing the Biological Interactions of a Therapeutic Small Peptide at the Tissue, Cellular, and Molecular Levels for Treating Retinal Diseases.

Doctor of Philosophy *continued*

Brian Chansol Lee *(Chemistry)* B.S., University of Illinois at Urbana-Champaign 2019.
Thesis: Investigation and Control of the Electrode/Electrolyte Interface in Electrochemical Systems.

Dongkwan Lee *(Chemical Engineering)* B.S., University of Illinois at Urbana-Champaign 2018; M.S., California Institute of Technology 2022.
Thesis: Bond-Selective Nonlinear Optical Microscopy: From Live Cells to Single-Molecule Imaging.

Li-En Lin *(Chemistry)* B.Sc., National Taiwan University 2018.
Thesis: Advancing Stimulated Raman Scattering Microscopy through Deep Learning and Gel-Based Tissue Engineering.

Alexandre Luiz Lourenço *(Biochemistry and Molecular Biophysics)* B.S., Stanford University 2020.
Thesis: Building Closed-Loop Frameworks for AI-Guided Protein Design.

Kaitlin Mary Luedecke *(Chemistry)* B.S., The University of Georgia 2020.
Thesis: Elucidating the Role of Transition Metal Electronic Structure in Catalysis and Spin Relaxation.

Elliot James MacKrell *(Chemical Engineering)* B.S., University of Florida 2016.
Thesis: Global Analysis of Protein Synthesis and Degradation in *Escherichia coli*.

Huanghao Mai *(Biochemistry and Molecular Biophysics)* B.S., Stanford University 2019.
Thesis: Advancing Structural Analysis with Computational Methods Development.

Sophie Eve Miller *(Chemical Engineering)* B.S., Stanford University 2015; M.Phil., University of Cambridge 2017; M.S., California Institute of Technology 2021.
Thesis: Time-Resolved Proteomic Analysis in Zebrafish and Cultured Neurons Using Bioorthogonal Noncanonical Amino Acid Tagging.

Ruben Mirzoyan *(Chemistry)* B.Sc., University of Toronto 2018.
Thesis: Electron Dynamics in Molecular Qubits and Catalytic Films.

Maryann Morales *(Chemistry)* B.S., University of California, Riverside 2020.
Thesis: Metal Binding to Nsp1, a SARS-CoV-2 Protein.

Vy Ngoc Mai Nguyen *(Biochemistry and Molecular Biophysics)* B.S., University of California, Los Angeles 2019.
Thesis: Structural and Mechanistic Studies of Membrane Protein Biogenesis and Quality Control at the Endoplasmic Reticulum.

Danika Katherine Nimlos *(Chemistry)* B.S., University of California, Berkeley 2018.
Thesis: Development and Characterization of a Table-Top Laser-Produced Plasma Source for In-Situ and Time-Resolved Soft X-Ray Absorption Spectroscopy.

Doctor of Philosophy *continued*

Eshaan Salim Patheria *(Chemistry)* A.B., Harvard College 2018.

Thesis: Multielectron Redox in Lithium-Rich, Industrial-Element Sulfides for High Energy Density Lithium-Ion Battery Cathodes.

Linqing Peng *(Chemistry)* B.A., Grinnell College 2019.

Thesis: Harnessing Locality for Scalable Strongly Correlated Electron Simulations.

Ruojing Peng *(Chemistry)* B.S., The Ohio State University 2019.

Thesis: Classical Representation and Manipulation of Quantum Many Body States and High Dimensional Data.

Kim Hoang Pham *(Chemistry)* Sc.B., Brown University 2019.

Thesis: Application of Ultrafast Spectroscopy Techniques to Probe Correlated Ion Hopping Mechanisms in Solid-State Ion Conductors.

Michelle Dena Qian *(Chemistry)* B.Sc., University of Minnesota, Twin Cities 2019.

Thesis: Beyond Li: Challenges in Moving Towards Earth-Abundant Battery Materials.

William Max Rosencrans *(Biochemistry and Molecular Biophysics)* B.A., Colgate University 2019.

Thesis: Mechanisms of Pharmacological and Cellular Regulators of Mitophagy.

Lucas Jean Nicolas Schaus *(Biochemistry and Molecular Biophysics)* B.Sc., Swiss Federal Institute of Technology Zurich 2015; M.Sc., 2018.

Thesis: Studies on Scaling Throughput in Protein Engineering.

Erik Tao Schrunk *(Chemical Engineering)* B.S., Columbia University 2018.

Thesis: Biomolecular Engineering of Gas Vesicles with Thiol Functionality.

Andrea Anna Therese Stegner *(Chemistry)* M.Sc., Ludwig Maximilian University of Munich 2019.

Thesis: Design and Application of Complexity Generating Strategies and Transformations in Natural Product Synthesis.

Steven Hartzel Stradley *(Chemical Engineering)* B.S.E., Tulane University 2019.

Thesis: Materials and Interfaces to Enable Reversible Mg Electrochemistry for Energy Storage Applications.

Jiace Sun *(Chemistry)* B.S., University of Science and Technology of China 2019.

Thesis: Classical and Quantum Simulation of Chemical and Physical Systems.

Hannah Kate Szentkuti *(Chemistry)* B.S., Mills College 2018.

Thesis: Anthropogenic Emissions and the Future of Our Atmosphere: I. Cyclohexanol Chemistry and Aerosol Formation in an Environmental Chamber II. K_2CO_3-Based Sorbent Development and Testing in a Packed Bed Reactor for CO_2 Capture.

Zhengjia Jaron Tong *(Chemistry)* B.S., Purdue University 2018.

Thesis: Spectroscopic Investigation, Kinetic Analysis, and Ligand Field Theory Rationalization of Catalytic Reactivity for Data-Driven Methodology Development.

Doctor of Philosophy *continued*

Jue Wang *(Biochemistry and Molecular Biophysics)* B.A., Grinnell College 2018.
Thesis: Direct Visualization of Cellular Protein Complexes *in situ* by Fluorescence-Guided Cryo-FIB-SEM and Cryo-ET..

Benjamin Bobin Ye *(Chemical Engineering)* B.S., University of Virginia 2019; M.S., California Institute of Technology 2022.
Thesis: Image Charge Effects Near Solid Surfaces.

Zhenqi *(Steven)* Zhao *(Chemistry)* B.S., Peking University 2019; M.S., University of California, Los Angeles 2021.
Thesis: Synthesis of Strained Systems via Vinyl Carbocation Intermediates.

DIVISION OF ENGINEERING AND APPLIED SCIENCE

Brayden Gieschen Aller *(Space Engineering)* B.Eng., Vanderbilt University 2019; M.S., California Institute of Technology 2020.
Thesis: Strain Sensing in Thin Composite Laminates with Embedded Fiber Bragg Grating Sensors.

Stephen Lowell Armstrong *(Materials Science)* B.S., The University of Texas at Austin 2017; M.S., California Institute of Technology 2021.
Thesis: Effects of Disorder on Quantum Phase Transitions and Quantum Dynamics.

Rahul Arun *(Aeronautics)* B.S., California Institute of Technology 2021; M.S., 2022.
Thesis: Beyond Symmetry: Normality-Based Analysis of Velocity Gradients in Turbulent Flows.

Eric Ballouz *(Mechanical Engineering)* B.S., Stanford University 2017; M.S., 2019.
Thesis: Resolvent Analysis of Non-Stationary Turbulent Flows and Transient Flow Phenomena.

Pau Batlle Franch *(Computing and Mathematical Sciences)* B.Sc., Universitat Politècnica de Catalunya 2020.
Thesis: Optimization-Based Statistical Inference: Constrained Inverse Problems, Worst-Case Priors, and Kernel Regression.

Alexandra Rose Baumgart *(Mechanical Engineering)* B.S., University of Illinois at Urbana-Champaign 2019; M.S., California Institute of Technology 2021.
Thesis: Numerical Stability and Reduced Order Chemistry Modeling in Detonation Simulations.

Purna Chandra Jagannadh Kumar Boddapati *(Mechanical Engineering with a minor in Computer Science)* B.Tech., Indian Institute of Technology Madras 2018; M.S., California Institute of Technology 2020.
Thesis: Shear-Normal Coupled Deformations in Anisotropic Structured Materials.

Doctor of Philosophy *continued*

Miles Chan *(Aeronautics)* B.S., Georgia Institute of Technology 2019; M.S., California Institute of Technology 2020.

Thesis: Reduced Order Modeling of Near-Wall and Roughness Sublayer Turbulence Using Resolvent Analysis.

Xiaoqiao Chen *(Computing and Mathematical Sciences)* B.S., Wuhan University 2018; M.S., California Institute of Technology 2020.

Thesis: Active Acquisition Methods for Single Cell Genomics.

Changsoon Choi *(Electrical Engineering)* B.S., Korea University 2015; M.S., 2018; M.S., California Institute of Technology 2020.

Thesis: Techniques for Molecular Detection: From Mid-Infrared Spectrometers to Nanopore Devices.

Nicolas Henry Christianson *(Computing and Mathematical Sciences)* A.B., Harvard College 2020.

Thesis: Machine Learning-Augmented Algorithms: Theory and Applications in Energy and Sustainability.

Ryan Kazuo Cosner *(Mechanical Engineering)* B.S., University of California, Berkeley 2019; M.S., California Institute of Technology 2021.

Thesis: Dynamic Safety Under Uncertainty: A Control Barrier Function Approach.

Noel Csomay-Shanklin *(Control and Dynamical Systems)* B.S., Georgia Institute of Technology 2019.

Thesis: Layered Control Architectures: Constructive Theory and Application to Legged Robots.

D.M. Sahangi Pulsarani Dassanayake *(Space Engineering)* B.Sc., University of Moratuwa 2018; M.S., California Institute of Technology 2020; M.Sc., University of Moratuwa 2020.

Thesis: Space Legos: A Concept for In-Space Assembly of Large Structures with a Stationary Robot.

Emily Katherine de Jong *(Mechanical Engineering)* B.S.E., Princeton University 2019; M.S., California Institute of Technology 2021.

Thesis: Cloudy with a Chance of Microphysics: Modeling Droplet Collisions for the Climate Scale.

Dhruv Chimanbhai Desai *(Applied Physics)* B.S., University of Illinois at Urbana-Champaign 2019; M.S., California Institute of Technology 2022.

Thesis: First-Principles Calculations of Magnetotransport and Electron-Phonon Interactions in Semiconductors and Topological Materials.

Doctor of Philosophy *continued*

Ethan Nicholas Epperly *(Applied and Computational Mathematics)* B.S., University of California, Santa Barbara 2020.
Thesis: Make the Most of What You Have: Resource-Efficient Randomized Algorithms for Matrix Computations.

Chelsea Brae Fox *(Mechanical Engineering)* B.S., University of Rhode Island 2019; M.S., 2021.
Thesis: Mechanical Characterization of Irregular Architected Two-Phase Materials.

Maodong Gao *(Applied Physics with a minor in Computational Science and Engineering)* B.S., Tsinghua University 2019; M.S., California Institute of Technology 2022.
Thesis: Physics and Applications of Compact Optical Frequency Comb.

Robert Matthew Gray *(Electrical Engineering)* B.S., Northwestern University 2019; M.S., California Institute of Technology 2022.
Thesis: Ultrafast Quadratic Nonlinear Dynamics and Soliton Formation in Parametric Amplifiers and Oscillators.

Tanner David Harms *(Aeronautics with a minor in Computer Science)* B.S., University of Wyoming 2016; M.S., 2019; M.S., California Institute of Technology 2020.
Thesis: Chasing After the Wind: Flow Structure Detection Strategies for Autonomous Mobile Flow Field Measurements.

Benjamin Henrik James Hatanpää *(Materials Science)* B.S., Georgia Institute of Technology 2018.
Thesis: High-Field Charge Transport and Fluctuation Phenomena in Semiconductors from First Principles.

Utku Hatipoğlu *(Applied Physics)* B.S., Bilkent University 2017; M.S., 2019; M.S., California Institute of Technology 2022.
Thesis: Tuning Hybrid Optomechanics for Remote Entanglement.

Liam Frank Raven Heidt *(Aeronautics)* B.E., The University of Sydney 2017; M.S., California Institute of Technology 2019.
Thesis: Modal Analysis of Harmonically Forced Turbulent Flows with Application to Jets.

Wenzheng Heng *(Medical Engineering)* B.E., Zhejiang University 2020; M.S., California Institute of Technology 2023.
Thesis: Smart Masks for in situ Exhaled Breath Condensate Harvesting and Analysis.

Meredith Leigh Hooper *(Aeronautics)* B.S.E., Princeton University 2020; M.S., California Institute of Technology 2022.
Thesis: Machine-Learned Propulsion Strategies: From Adaptive Damage Compensation to Advanced Aeromobility.

Doctor of Philosophy *continued*

Wei Hou *(Mechanical Engineering with a minor in Applied and Computational Mathematics)* B.S., University of California, Los Angeles 2019; M.S., California Institute of Technology 2021.
Thesis: Fast Algorithms for Spanwise Periodic Incompressible External Flows: From Simulation to Analysis.

Yuting Huang *(Mechanical Engineering)* B.S., University of California, San Diego 2018; M.S., California Institute of Technology 2020.
Thesis: Linear and Non-Linear Interactions Involving Large-Scale Structures in Turbulence.

Emily Yoonju Hwang *(Materials Science)* B.S., Harvey Mudd College 2020; M.S., California Institute of Technology 2022.
Thesis: Nonlinear Frequency Conversion in Lithium Niobate Nanophotonic Circuits for Quantum Spectroscopy.

Cheolmin Im *(Applied Physics)* B.A., University of California, Berkeley 2019; M.S., California Institute of Technology 2024.
Thesis: Simulation of Electrohydrodynamic Distortion Relevant to Liquid Metal Ion Sources.

Qingxin Ji *(Applied Physics)* B.S., Peking University 2020; M.S., California Institute of Technology 2022.
Thesis: Optical Frequency Division Using High-Q Integrated Photonics.

Jiaqing Jiang *(Computer Science)* B.S., Nankai University 2017; M.S., University of Chinese Academy of Sciences 2020.
Thesis: Computational Complexity and Quantum Gibbs Sampling for Local Hamiltonians.

Taylan Kargin *(Electrical Engineering)* B.S., Bilkent University 2019; M.S., California Institute of Technology 2023.
Thesis: Reliable Autonomy Under Uncertainty: From Learning-Based to Non-Rational Control.

Yeokyoung Kil *(Medical Engineering)* B.S., California Institute of Technology 2020; M.S., 2023.
Thesis: Engineering and Computational Tools for Salivary Biomedicine.

Taeho Kim *(Applied Mechanics)* B.S.E., University of Michigan, Ann Arbor 2018; M.S., California Institute of Technology 2021.
Thesis: Modeling Frictional Processes in the Presence of Fluids: From Earthquakes in the Laboratory to Induced Seismicity in Geothermal Reservoirs.

William Robert King *(Computer Science)* M.S., University of Cambridge 2021.
Thesis: Advancing Applications of Quantum Computers in Quantum Simulation, Optimization, Learning, and Topological Data Analysis.

Doctor of Philosophy *continued*

Pranav Dhananjay Kulkarni *(Electrical Engineering with a minor in Applied and Computational Mathematics)* B.Tech., Indian Institute of Technology Bombay 2019; M.S., California Institute of Technology 2021.
Thesis: Signal Processing for Line Spectra: New Sensor Arrays, Algorithms, and Theoretical Results.

Vladimir Ladygin *(Materials Science)* B.S., Moscow Institute of Physics and Technology 2018; M.S., 2020; M.S., California Institute of Technology 2022.
Thesis: Phonon-Phonon Interactions in Highly Anharmonic Systems.

Barry Patrick Lawlor *(Mechanical Engineering)* B.S., University of California, San Diego 2020; M.S., California Institute of Technology 2022.
Thesis: Full-Field Quantitative Visualization of Shock-Driven Pore Collapse in Solids: Mechanics of Deformation, Failure, and Interaction.

Seola Lee *(Mechanical Engineering)* B.S., University of Wisconsin-Madison 2019; M.S., California Institute of Technology 2021.
Thesis: Multiscale Design, Fabrication, and Mechanical Analysis of Structural Hierarchies in Functional Materials.

Gordon Han Ying Li *(Applied Physics)* B.Sc., The University of Sydney 2019; M.S., California Institute of Technology 2022.
Thesis: Ultrafast Computing with Nonlinear Photonics.

Melissa Li *(Applied Physics)* S.B., Massachusetts Institute of Technology 2017; M.Eng., 2019.
Thesis: Atomically Thin Spatial Light Modulators with Excitonic Nanomaterials.

Zongyi Li *(Computing and Mathematical Sciences)* B.S., Washington University in St. Louis 2019.
Thesis: Neural Operators for Scientific Computing.

Mingshu Liang *(Electrical Engineering)* B.S., Zhejiang University 2019.
Thesis: Harvesting Insights from Advanced Microscope Acquisitions: Techniques and Applications.

Matthew Murray Libersky *(Applied Physics)* B.S., Valparaiso University 2016; M.S., California Institute of Technology 2020.
Thesis: Microwave Spectroscopy for Probing Electronuclear Modes in Quantum Magnets.

Yiheng Lin *(Computing and Mathematical Sciences)* B.E., Tsinghua University 2020; M.S., California Institute of Technology 2024.
Thesis: Predictions and Policy Optimization in Online Decision Making.

Shengduo Liu *(Mechanical Engineering with a minor in Applied and Computational Mathematics)* B.E., Tsinghua University 2019; M.S., California Institute of Technology 2021.
Thesis: Numerical Analyses of Frictional Sliding on Rate-and-State Interfaces: Fluid Effects, Dynamic Weakening, and Potential-Based Formulation Through Machine Learning.

Doctor of Philosophy *continued*

Adrian Richard Llanos *(Applied Physics)* B.A.Sc., University of Toronto 2016.
Thesis: New Structural and Electronic Degrees of Freedom in Epitaxial Square-Net Materials.

Tracy Lu *(Mechanical Engineering)* B.S., Duke University 2019; M.S., California Institute of Technology 2021.
Thesis: Variable-Stiffness and Shape-Morphing Structured Media.

Heather Lauren Lukas *(Medical Engineering)* B.S., Cornell University 2019; M.S., California Institute of Technology 2021.
Thesis: Engineering Bioaffinity Sensors toward Continuous Electrochemical Biosensing.

Elena Sorina Lupu *(Space Engineering)* B.S., Politehnica University of Bucharest 2015; M.Sc., École Polytechnique Fédérale de Lausanne 2018; M.S., California Institute of Technology 2021.
Thesis: Perception-Driven Autonomy and Learning Control for Ground Vehicles.

Nina Mohebbi *(Aeronautics)* B.S., Georgia Institute of Technology 2016; M.S., California Institute of Technology 2022.
Thesis: Flow Induced by Collective Vertical Migration: Impact of Swimmer Distribution, Buoyancy, and Wake Interactions.

Daniel Mukasa *(Materials Science)* B.A., Oberlin College 2019; M.S., California Institute of Technology 2021.
Thesis: Computational Design of Wearable Chemical Sensors for Personalized Healthcare.

Charles Bruce Musgrave III *(Applied Physics)* B.S., University of Colorado at Boulder 2019; M.S., California Institute of Technology 2023.
Thesis: Computational Approaches to Problems in Energy and Sustainability.

Stephanie Lea O'Gara *(Mechanical Engineering)* B.S., Columbia University 2016; M.S., California Institute of Technology 2021.
Thesis: Buoyancy-Driven Fluid Dynamics for Enhanced Ocular Drug Delivery.

John Monroe Pederson *(Aeronautics)* B.S., Columbia University 2019; M.S., California Institute of Technology 2020.
Thesis: Thermoelastic Deflections of Thin-Shell Composite Space Structures.

James Francis Ragan III *(Space Engineering)* B.S., University of Washington 2019; M.S., California Institute of Technology 2020.
Thesis: Planning for an Uncertain Future: Tree-based Methods for Real-Time Fault Estimation, Collision Avoidance, and Multi-Agent Reconfiguration.

Aakila Rajan *(Mechanical Engineering)* B.Tech., Indian Institute of Technology Madras 2020; M.S., California Institute of Technology 2022.
Thesis: Methods for Learning Mechanics: Inverse Problems, Constitutive Modeling, and Design.

Doctor of Philosophy *continued*

Donner Thomas Schoeffler *(Aeronautics)* B.S., Loyola Marymount University 2019; M.S., California Institute of Technology 2020.
Thesis: Measurement and Modeling of Detonation-Driven Shock Tube Flows.

Ryoto Sekine *(Electrical Engineering)* B.S.E., Princeton University 2019; M.S., California Institute of Technology 2022.
Thesis: Lithium Niobate Nanophotonic Circuits for Information Processing.

Komron Joseph Shayegan *(Electrical Engineering)* B.S.E., Princeton University 2018.
Thesis: Nanophotonic Engineering of Thermal Emitters.

Kiran Arik Shila *(Electrical Engineering)* B.S., University of South Florida 2018; M.S., 2020.
Thesis: Low Noise at Low Cost for Large Radio Astronomy Arrays.

Joseph Alfred Slote *(Computer Science)* B.A., Carleton College 2016; M.Sc., University of Oxford 2017.
Thesis: Discrete Harmonic Analysis and its Applications to Testing, Learning, and Complexity.

Samuel Aaron Solomon *(Medical and Electrical Engineering)* S.B., Massachusetts Institute of Technology 2020; M.S., California Institute of Technology 2023.
Thesis: A Path Towards Wearable Affective General Intelligence.

Gregory Matthew Stroot *(Mechanical Engineering with a minor in Computer Science)* B.S., University of Illinois at Urbana-Champaign 2019; M.S., California Institute of Technology 2021.
Thesis: Acoustic Radiation in Hypersonic Turbulent Boundary Layers: Deciphering Linear Dynamics.

Jacqueline Rose Tawney *(Aeronautics)* B.S., Drexel University 2018; M.S., California Institute of Technology 2020.
Thesis: Aqueous Metallo-Megasupramolecules: From Stability to Extensional Flow Properties.

Prachi Thureja *(Applied Physics)* B.Sc., Swiss Federal Institute of Technology Zurich 2017; M.Sc., 2019; M.S., California Institute of Technology 2022.
Thesis: Electrically Reconfigurable Optical Metasurfaces for Universal Wavefront Shaping.

Thomas Tuan Tran *(Materials Science)* B.S., University of California, Los Angeles 2020; M.S., California Institute of Technology 2022.
Thesis: Microstructural and Mechanical Characterization of Additively Manufactured Binary Metallic Alloys.

Margaret Katherine Trautner *(Computing and Mathematical Sciences)* S.B., Massachusetts Institute of Technology 2020.
Thesis: Operator Learning for Scientific Computing.

Doctor of Philosophy *continued*

Panteleimon Vafeidis *(Computation and Neural Systems)* Diplom, Aristotle University of Thessaloniki 2017.

Thesis: Neural Network Models of Learning and Generalization.

James Anthony Williams *(Electrical Engineering)* B.S., Northwestern University 2020; M.S., California Institute of Technology 2024.

Thesis: Ultrafast Quantum State Generation and Measurement in Nonlinear Nanophotonics.

Tian Xie *(Applied Physics)* B.S., Tsinghua University 2018; M.S., California Institute of Technology 2020.

Thesis: Scalable On-chip Platforms for Quantum Microwave-Optical Interface with Solid-State Ensembles.

Jing Yu *(Control and Dynamical Systems)* B.S., Georgia Institute of Technology 2016.

Thesis: Safe and Scalable Learning-Based Control: Theory and Application in Sustainable Energy Systems.

Wenxin Zhang *(Mechanical Engineering)* B.S., University of California, Berkeley 2020; M.S., California Institute of Technology 2022.

Thesis: Advanced Nano Manufacturing Enables Probing Fundamental Mechanical Behaviors of Materials.

Jiawei Zhao *(Computing and Mathematical Sciences)* B.A., Nanjing University of Aeronautics and Astronautics 2019.

Thesis: Understanding and Improving Efficiency in Training of Deep Neural Networks.

Ziran Zhou *(Mechanical Engineering with a minor in Applied and Computational Mathematics)* B.S., University of Illinois at Urbana-Champaign 2019; M.S., California Institute of Technology 2021.

Thesis: Predictive Modeling of Architected Solids across Scales.

DIVISION OF GEOLOGICAL AND PLANETARY SCIENCES

James William Atterholt *(Geophysics)* B.S., Indiana University Bloomington 2019; M.S., California Institute of Technology 2022.

Thesis: Fault Zone Structure and Rupture Behavior with Fiber-Optic Sensing and Second Moments.

David Brooking Bonan *(Environmental Science and Engineering)* B.S., University of Washington 2019; M.S., California Institute of Technology 2021.

Thesis: Explications of a Changing Climate.

Maria Noel Camarca *(Planetary Science)* B.S., Marymount University 2017; M.S., California Institute of Technology 2021.

Thesis: Fresh Eyes for an Old Moon: ALMA and JWST Perspectives of Callisto.

Doctor of Philosophy *continued*

Costa Christopoulos *(Environmental Science and Engineering)* S.B., Massachusetts Institute of Technology 2017; M.S., California Institute of Technology 2021.
Thesis: Towards Hybrid Physics-Machine Learning Parameterizations: Employing Data Assimilation for Online Learning of Turbulence and Convection Closures in a Unified Scheme.

Hannah Henning Dion-Kirschner *(Geobiology)* B.A., Northwestern University 2018; M.S., California Institute of Technology 2021.
Thesis: Carbon in Flux: Measuring the Climate Sensitivity of Terrestrial Greenhouse Gas Uptake.

Michael Christopher Greklek-McKeon *(Planetary Science)* B.S., University of Maryland, College Park 2019; M.S., California Institute of Technology 2021.
Thesis: The Compositional Diversity of Small Planets Orbiting Low-Mass Stars.

Yongzhao Guo *(Environmental Science and Engineering)* B.Eng., Wuhan University 2014; M.S., Peking University 2017.
Thesis: Exploring Versatility of Energy Metabolism and Dynamics of Anabolism and Growth in Anaerobic Methanotrophic Consortia.

Polina Khapikova *(Environmental Science and Engineering)* B.S., University of California, Davis 2019; M.S., California Institute of Technology 2021.
Thesis: From Hadley Cells to Heat Extremes: Novel Physical and Statistical Frameworks for Evaluating Climate Models.

Tobias Köhne *(Geophysics)* B.S., Technische Universität München 2016; M.S., The University of Texas at Austin 2018; M.S., California Institute of Technology 2021.
Thesis: From Daily Deformation to Millennial Mechanics: Insights from Subduction Zone Earthquake Cycle Models.

Weiyi Liu *(Geochemistry)* B.S., University of Science and Technology of China 2017; M.S., University of Chinese Academy of Sciences 2020.
Thesis: Insights Into the Core's Structure, Formation and Evolution from First-Principles Calculations.

Emily Yishiuan Miaou *(Geochemistry)* B.S., California Institute of Technology 2018; M.S., 2020.
Thesis: From Melting Dynamics to Medical Diagnostics: Studies in Geochemical Kinetics.

Sara Edinger Murphy *(Environmental Science and Engineering)* B.A., Pomona College 2018; M.S., California Institute of Technology 2021.
Thesis: Elucidating the Products and Kinetics of Bimolecular Alkene-Derived Peroxy Radical Reactions in the Lab and in the Field.

Doctor of Philosophy *continued*

Justin Anh-Khoa Nghiem *(Geology)* B.A., University of California, Berkeley 2019; M.S., California Institute of Technology 2021.
Thesis: Flocculation and Transport of Mud in Rivers and Deltas.

Sergio Alexander Parra *(Geobiology)* B.S., Georgia Institute of Technology 2018; M.S., California Institute of Technology 2020.
Thesis: Location, Location, Location: Insights from Spatially-Resolved Observations of Marine Seep Carbonate Ecosystems and Carbonaceous Chondrite Surfaces.

Henry Grant Peterson *(Environmental Science and Engineering)* B.S., University of California, Berkeley 2019; M.S., California Institute of Technology 2021.
Thesis: Mixing-Driven Abyssal Ocean Circulation over Sloping Topography.

Juliet Rose Ryan-Davis *(Geology)* B.A., Middlebury College 2013; M.S., California Institute of Technology 2020.
Thesis: Crystalline Records of Mafic Arc Magmas Across the Sierra Nevada Batholith, California.

Christina Hope Seeger *(Geology)* B.A., Williams College 2016; M.S., Western Washington University 2020.
Thesis: Surface Evolution on Basaltic Bodies: Tectonic, Geomorphic, and Diagenetic Modification on Io and Mars.

Shaelyn Nicole Silverman *(Geobiology)* B.A., University of Colorado at Boulder 2017; M.S., California Institute of Technology 2021.
Thesis: From Pure Cultures to Particles: Tracing Microbial Metabolism through Amino Acid $^{2}H/^{1}H$ Ratios.

Benjamin Thomas Strozewski *(Geophysics)* B.A., Washington University in St. Louis 2019; M.S., California Institute of Technology 2021.
Thesis: Crystal Chemistry and Seismic Wavespeeds of Dense Oxyhydroxides: Hydrogen Transport in Earth's Lower Mantle.

Ryan Xavier Ward *(Environmental Science and Engineering)* B.S., University of Florida 2019; M.S., California Institute of Technology 2021.
Thesis: Observational and Computational Studies of Atmospheric Particle Formation.

Yan Yang *(Geophysics with a minor in Computational Science and Engineering)* B.S., University of Science and Technology of China 2016; M.S., 2019; M.S., California Institute of Technology 2021.
Thesis: Imaging the Earth's Near Surface with Dense Seismic Observation.

Doctor of Philosophy *continued*

DIVISION OF THE HUMANITIES AND SOCIAL SCIENCES

Polina Detkova *(Social Science)* B.S., National Research University Higher School of Economics 2017; M.A., New Economic School 2019; M.S., California Institute of Technology 2024.
Thesis: Essays in Experimental Economics.

Weilun Ding *(Social and Decision Neuroscience)* B.A., Fudan University 2016; M.S., University of Rochester 2017.
Thesis: Core Reinforcement Learning Computations Underlying Distinct Behavioral Strategies and their Implications in Psychiatry.

Peter Nathanael Doe *(Social Science)* B.B.A., Baylor University 2020.
Thesis: Essays in Matching Theory.

Brenden Eum *(Social and Decision Neuroscience)* B.A., New York University 2016; M.A., Columbia University 2017.
Thesis: Essays on Sequential Sampling in Value-Based Choice.

Kexin Feng *(Social Science)* B.S., The College of William & Mary 2020; M.S., California Institute of Technology 2023.
Thesis: Tensions, Trade, and Transformation: Essays on Chinese Economic History During the Warlord Era.

Jacob Morrier *(Social Science)* B.Sc., Université du Québec à Montréal 2019; B.Sc., Université Paris Dauphine - PSL 2019; M.S., California Institute of Technology 2021.
Thesis: Essays on Political Accountability and Representation.

Marcos Felipe Nazareth Gallo *(Social and Decision Neuroscience)* B.A., Brigham Young University 2016; M.Sc., Shanghai Jiao Tong University 2019.
Thesis: Psychological Insights into Decisions Relevant to Public Policy.

Ke Shi *(Social Science)* B.A., New York University 2020; M.S., California Institute of Technology 2023.
Thesis: Essays in Empirical Industrial Organization and Corporate Finance.

Fan Wu *(Social Science)* B.S., Peking University 2017; M.S., Tsinghua University 2019; M.S., California Institute of Technology 2024.
Thesis: Essays on Information Economics.

Sanghyun Yi *(Social and Decision Neuroscience)* B.S., Seoul National University 2018.
Thesis: Neurocomputational Understanding of Decision-Making in Novel Environments.

Doctor of Philosophy *continued*

DIVISION OF PHYSICS, MATHEMATICS AND ASTRONOMY

Adam Markus Artymowicz *(Mathematics)* B.Sc., University of Toronto 2017; M.Sc., McGill University 2019.
Thesis: Aspects of Topology and Measurement in Quantum Lattice Systems.

Chi-Fang Chen *(Physics)* B.S., Stanford University 2019.
Thesis: Quantum Gibbs Sampling.

Maria Dominika Derda *(Physics)* M.Phys., University of Edinburgh 2019.
Thesis: Soft Theorems from Spontaneous Symmetry Breaking.

Philip Easo *(Mathematics)* B.A., University of Cambridge 2020.
Thesis: Percolation on Transitive Graphs.

Ruide Fu *(Mathematics)* B.S., Peking University 2019.
Thesis: Two Categorifications of the Local Langlands Correspondence for the Torus.

Sitanshu Gakkhar *(Mathematics)* B.S., Utah State University 2006; M.S., Simon Fraser University 2012.
Thesis: Spin Geometry and Quantum Diffusion.

Elliott Gesteau *(Mathematics)* M.Sc, University of Waterloo 2019.
Thesis: Mathematics of the Holographic Principle.

Jacob Matthew Golomb *(Physics)* B.S., University of Maryland, College Park 2020; M.S., California Institute of Technology 2023.
Thesis: Probing Astrophysics, Cosmology, and Nuclear Physics with Gravitational Waves from Black Holes and Neutron Stars.

Sarah Mary Habib *(Physics)* B.S., University of Illinois at Urbana-Champaign 2020; M.S., California Institute of Technology 2024.
Thesis: Error Quantification and Mitigation for Numerical Compact Binary Waveforms.

Duxing Hao *(Physics)* B.S., Shanghai Jiao Tong University 2018; M.S., California Institute of Technology 2023.
Thesis: Novel Electronic and Optoelectronic Interactions in Two-Dimensional Materials.

Thorgal Gaëtan Hinault *(Mathematics)* B.S., Ecole Normale Superieure de Lyon 2017; M.Sc., Université Paris-Saclay 2020.
Thesis: Gromov-Witten Theory, Non-Archimedean Geometry, and Mirror Symmetry.

Sophie Rose Hourihane *(Physics)* B.S., University of Michigan, Ann Arbor 2020.
Thesis: A Glitch and the Matrix: Advances in Gravitational-Wave Glitch Mitigation and Acceleration of Pulsar Timing Analyses.

Doctor of Philosophy *continued*

Yuping Huang *(Astrophysics)* B.A., Carleton College 2017; M.S., California Institute of Technology 2019.

Thesis: Building a Radio Camera in Search of Exoplanet Magnetospheres.

Viraj Karambelkar *(Astrophysics)* B.Tech., Indian Institute of Technology Bombay 2019; M.S., California Institute of Technology 2021.

Thesis: The Landscape of Stellar Mergers with Time-Domain Surveys.

Yoonsoo Kim *(Physics)* B.Sc., Seoul National University 2020; M.S., California Institute of Technology 2024.

Thesis: Numerical Modeling of High-energy Transients from Black Holes and Neutron Stars.

Vincent Sze Him Lee *(Physics)* B.Sc., The Chinese University of Hong Kong 2019.

Thesis: Search for Dark Matter and Vacuum Quantum Gravity Fluctuations using Gravitational Wave Experiments.

Isaac Norman Legred *(Physics)* B.A., Cornell University 2020; M.S., California Institute of Technology 2024.

Thesis: Neutron Stars: Robust Constraints on Dense Matter from Astrophysics.

Jeck Lim *(Mathematics)* B.A., M.Sc., University of Cambridge 2020.

Thesis: Sums of Various Dilates.

Evan Haze Nunez-Cravin *(Astrophysics)* A.S., El Camino College 2017; B.S., California State Polytechnic University, Pomona 2019; M.S., California Institute of Technology 2021.

Thesis: An "InCLOSE" View of the Circumgalactic Medium of z~2 Star-Forming Galaxies.

Liam Christopher O'Brien *(Physics)* B.S., University of Massachusetts Amherst 2018; M.S., California Institute of Technology 2022.

Thesis: The Enemy of my Enemy: How Disorder and Dissipation Can Be Your Friend in Quantum Systems.

Ashay Naren Patel *(Physics)* B.A., Williams College 2018; M.S., California Institute of Technology 2023.

Thesis: New Technologies for Control and Measurement of Polyatomic Molecules.

Christopher Anand Pattison *(Physics)* B.S., Texas A&M University 2019.

Thesis: Low-Overhead Quantum Fault Tolerance.

Varun Ranga Raj *(Physics)* B.A., University of California, Berkeley 2017.

Thesis: Measuring Neutrino Oscillations with NOvA and T2K.

Antonio Cuevas Rodriguez *(Astrophysics)* B.S., Stanford University 2020; M.S., California Institute of Technology 2023.

Thesis: Compact Object Binaries in the Multiwavelength and Time Domain Sky.

Doctor of Philosophy *continued*

Nicholas Zhao Rui *(Physics)* B.A., University of California, Berkeley 2020; M.S., California Institute of Technology 2023.
Thesis: Seismic Probes of Stellar Mergers and Magnetism.

Brian Christopher Seymour *(Physics)* B.S., University of Virginia 2019; M.Sc., University of Cambridge 2020.
Thesis: Future Prospects in Gravitational Waves: From Testing Fundamental Physics to Instruments beyond LIGO.

Yashvi Sharma *(Astrophysics)* B.Tech., Indian Institute of Technology Bombay 2019; M.S., California Institute of Technology 2021.
Thesis: Chasing Metamorphic Supernovae with Zwicky Transient Facility, SEDM-KP, and AI.

Nadine Hany Soliman *(Astrophysics)* B.Sc., New York University 2019; M.S., California Institute of Technology 2024.
Thesis: Dust in Astrophysical Systems: Impacts on Dynamics, Plasma Physics, and Thermochemistry.

Rajashik Tarafder *(Physics)* B.S., M.S., Indian Institute of Science Education and Research, Kolkata 2017.
Thesis: Quantum Metrology for Enhanced Gravitational-Wave Detection.

Adriano Testa *(Physics)* B.Sc., Sapienza Università di Roma 2016.
Thesis: Ripples from the Early Universe to the Present.

Rhiannon Pollard Udall *(Physics)* B.S., Georgia Institute of Technology 2020.
Thesis: Robust Gravitational Wave Analysis at the Catalog Scale.

Albert Kamau Wandui *(Physics)* B.S., Stanford University 2017; M.S., California Institute of Technology 2022.
Thesis: Thermal Kinetic Inductance Detectors (TKIDs) for Cosmic Microwave Background (CMB) Polarimetry.

Zongyuan Wang *(Physics)* B.S., University of Illinois at Urbana-Champaign 2019.
Thesis: Type-I Fractons -- Foliation in Non-Abelian Models.

Osmond Zichen Wen *(Physics)* B.S., Rice University 2018.
Thesis: Strategic Planning and Sensitivity-Enhancing Tactics for Detecting Low-Mass Particle Dark Matter with Phonon-Mediated Detectors.

Michael Solomon Wolman *(Mathematics)* B.Sc., McGill University 2019; M.Sc., 2020.
Thesis: Invariant Combinatorics on Borel Equivalence Relations.

Yeyuan Xin *(Physics)* B.S., California Institute of Technology 2018.
Thesis: Use of Light Coherence for Exoplanet Detection and Characterization.

Doctor of Philosophy *continued*

Wenhao (Jerry) Xuan *(Astrophysics)* B.A., Pomona College 2019; M.S., University of Cambridge 2020; M.S., California Institute of Technology 2023.
Thesis: Probing the Origins of Directly Imaged Planets and Brown Dwarfs: From Atmospheric Compositions to Binarity.

Christopher Kai-Chen Yang *(Physics)* B.A., University of California, Berkeley 2020.
Thesis: Dynamical Control of Many-Body Interactions in Driven Quantum Matter.

Jiaxin Zhang *(Mathematics)* B.S., Peking University 2019.
Thesis: On Multiple SLE Systems and Their Deterministic Limits.

Yiran Zhang *(Physics)* B.Sc., Shanghai Jiao Tong University 2018.
Thesis: Spin-Orbit Enhanced Superconductivity in Graphene Heterostructures.

Yiwen Zhang *(Physics)* B.S., University of Wisconsin-Madison 2019; M.S., California Institute of Technology 2023.
Thesis: Quantum Gravity and Laser Interferometry: Towards Observable Predictions.

PRIZES AND AWARDS

Prizes and awards are listed only for those students participating in Commencement this year, and include prizes and awards received by them in previous years.

MABEL BECKMAN PRIZE

Given in memory of Mabel Beckman's many years of commitment to Caltech's educational and research programs, this prize is awarded to an undergraduate woman (or women) who, upon completion of her junior or senior year at Caltech, has achieved academic excellence and demonstrated outstanding leadership skills, a commitment to personal excellence, good character, and a strong interest in the Caltech community.

2025 Sulekha Kishore, Shelby Anne Scott

FREDERIC W. HINRICHS, JR., MEMORIAL AWARD

This award, established by the Board of Trustees, is in memory of Frederick W. Hinrichs, Jr., who served for more than 20 years as dean and professor at Caltech. In remembrance of his honor, courage, and kindness, the annual award is given to the senior (or seniors) who, throughout their undergraduate years, made the greatest contribution to the student body and whose qualities of character, leadership, and responsibility have been outstanding. At the discretion of the dean, more than one award may be made in any year.

2025 Sophia A. Elam, Luke Frederick Zhou

GEORGE W. HOUSNER PRIZE FOR ACADEMIC EXCELLENCE AND ORIGINAL RESEARCH

This prize is given annually to a senior or seniors in the upper 20 percent of their class who have demonstrated excellence in scholarship and in the preparation of an outstanding piece of original scientific research. The students are selected by the deans and the Undergraduate Academic Standards and Honors Committee. At the discretion of the deans, more than one award may be given in any year. This prize is made possible by a gift from the late George W. Housner, Carl F Braun Professor of Engineering, Emeritus.

2025 Miguel Omar Liu-Schiaffini

MILTON AND FRANCIS CLAUSER DOCTORAL PRIZE

This prize is given to a Ph.D. candidate whose thesis is judged by a committee of the Faculty Board to exhibit significant new work, ingenuity, and originality, and to have the greatest potential to open new avenues of human thought and endeavor.

2025 Zongyi Li

The previous four prizes are announced at the Commencement ceremony.

THE CALTECH Y ADVOCATING CHANGE TOGETHER (ACT) AWARD

The Caltech Y Advocating Change Together (ACT) Award provides students with the opportunity to learn about a global, national, or local issue by immersing themselves with activists working on a cause.

2025 *Alec Lucas Laprevotte*

AMORI DOCTORAL PRIZE IN CMS

Established in 2017 by Michael Amori (M.S. '07), this prize honors outstanding dissertations in the computing and mathematical sciences during the current academic year. Awardees are selected by a committee of computing and mathematical sciences faculty each spring.

2024 *Jing Yu*

2025 *Yiheng Lin*

APOSTOL AWARD FOR EXCELLENCE IN TEACHING IN MATHEMATICS

Named in honor of Tom Apostol, who taught at Caltech for over 50 years, this award recognizes excellence in teaching by graduate and undergraduate teaching assistants in mathematics.

2024 *Michael Solomon Wolman*

2025 *Adam Markus Artymowicz*

CHARLES D. BABCOCK AWARD

Voted on by members of the aeronautics faculty, this award is given to a graduate student whose achievements in teaching or other assistance to students have made a significant contribution to the aeronautics department.

2021 *Miles Chan, Jacqueline Rose Tawney*

2022 *Tanner David Harms, Yuting Huang*

2023 *Rahul Arun*

2024 *Eric Ballouz*

ROBERT P. BALLES CALTECH MATHEMATICS SCHOLARS AWARD

This award is given to the mathematics major finishing their senior year who has demonstrated the most outstanding performance in mathematics courses completed in the student's time at Caltech.

2024 *Toyesh Kumar Jayaswal*

WILLIAM F. BALLHAUS PRIZE

This prize recognizes aeronautics students for outstanding doctoral dissertations.

2025 *Rahul Arun*

THE ARNOLD O. BECKMAN POLITICAL AWARD

This award promotes engaged citizenship by supporting motivated Caltech students in exploring elective government. Administered by the Caltech Y, the award encourages students to consider careers in public service and to deepen their understanding of the legislative process at the local, state, and national levels.

2025 *Sulekha Kishore, Nicole Huimei Lee*

ERIC TEMPLE BELL UNDERGRADUATE MATHEMATICS RESEARCH PRIZE

This prize is given to one or more juniors or seniors for outstanding original research in mathematics.

2025 *Eric Paul*

THE BHANSALI FAMILY PRIZE IN COMPUTER SCIENCE

Established in 2001 by Vineer Bhansali (B.S. '87, M.S. '87) in memory of his grandfather, Mag Raj Bhansali, this prize is given to an undergraduate student for outstanding research in computer science in the current academic year. Awardees are selected by a committee of computer science faculty.

2025 *Chu Xin Cheng*

THE BHANSALI FAMILY DOCTORAL PRIZE IN COMPUTER SCIENCE

Established in 2018 by Vineer Bhansali (B.S. '87, M.S. '87) in memory of his grandfather, Mag Raj Bhansali, this prize is given to honor outstanding dissertations in computer science, broadly defined, during the current academic year. Awardees are selected by a committee of computer science faculty each spring.

2025 *William Robert King, Joseph Alfred Slote*

AMASA BISHOP SUMMER STUDY ABROAD PRIZE

This prize is given to one or more first-years, sophomores, or juniors to fund summer study abroad in an organized program with the aim of gaining exposure to foreign language and international issues or cultures, including global issues in the sciences and engineering.

2022 *Zitian Ye*

RICHARD G. BREWER PRIZE IN PHYSICS

This prize recognizes a first-year with the most interesting solutions to the Physics 11 "hurdles," demonstrating intellectual promise and creativity at the very beginning of their Caltech education.

2022 *Victor Gomez*

ROLF D. BUHLER MEMORIAL AWARD IN AERONAUTICS

This award is given to an aeronautics student for outstanding academic achievement in the master's program.

2025 *Sophie Hillcoat*

FRITZ B. BURNS PRIZE IN GEOLOGY

This prize is given to an undergraduate who has demonstrated both academic excellence and great promise of future contributions in the fields represented by the Division of Geological and Planetary Sciences.

2023 *Michael Arlandres Matsuo Sowell*

2024 *Emma Xueqian Isella, Michael Arlandres Matsuo Sowell*

THE CALTECH Y RISE SERVICE AWARD

The Caltech Y Rise Service Award recognizes exceptional service provided by Rise Program tutors. This award highlights the dedication and outstanding contributions of individuals who exemplify the Caltech Y's commitment to service.

2025 *Genevieve Isabel Gandara, Hannah Henning Dion-Kirschner*

THE W. P. CAREY & CO. PRIZE IN APPLIED MATHEMATICS

Established by William P. Carey and W. P. Carey & Co., Inc., this prize is awarded to outstanding doctoral dissertations in applied mathematics in the current academic year. Awardees are selected by a committee of applied mathematics faculty.

2025 *Ethan Nicholas Epperly, Pau Batlle Franch*

BONNIE CASHIN PRIZE FOR IMAGINATIVE THINKING

Awarded annually, this prize is given to the entering first-year who wrote the most imaginative essays in the application for their first-year admission.

2022 *Chi Lan Cap*

IAN CAMPBELL AWARD

The Ian Campbell Award is for outstanding performance in field geology courses during this academic years.

2022 *Emily Claire Geyman*

2025 *Nicolas Stephan Anderson*

THE CCID AGENT OF CHANGE AWARD

This award is given to individuals embodying servant leadership through a demonstrated commitment to steering institutional change within the Caltech community. This person takes the initiative and has the vision to translate a need into actionable steps or policy to create a legacy and a more inclusive campus climate.

2024 *Dilichi Obichukwu Nwankwo*

2025 *Sophie Rose Hourihane*

CENTENNIAL PRIZE FOR THE BEST THESIS IN MECHANICAL AND CIVIL ENGINEERING

This prize, awarded annually to a Ph.D. candidate in applied mechanics, civil engineering, or mechanical engineering, is given to a student whose doctoral thesis is judged to be the most original and significant by a faculty committee appointed annually by the executive officer for mechanical and civil engineering. This prize was established with gifts from alumni following the Mechanical Engineering Centennial Celebration in 2007.

2025 *Emily Katherine de Jong, Seola Lee*

BEN P.C. CHOU DOCTORAL PRIZE IN IST

This prize recognizes outstanding doctoral dissertations in the broad area of information science and technology. The prize was established by Ben P.C. Chou's wife, June, and his son, Scott (B.S. '86), as a lasting tribute to his lifetime dedication to the pursuit of scholarly research and foregoing personal gain in favor of always doing the right thing for society.

2025 *Nicolas Henry Christianson*

ROBERT F. CHRISTY PRIZE FOR AN OUTSTANDING SENIOR IN THEORETICAL PHYSICS

This prize is awarded annually to a senior who has demonstrated excellence in theoretical physics through research and/or coursework. Established in 2018, this prize honors the memory of Robert F. Christy, former provost and professor of theoretical physics at Caltech.

2025 *Siddharth Boyeneni*

ROBERT F. CHRISTY PRIZE FOR AN OUTSTANDING DOCTORAL THESIS IN THEORETICAL PHYSICS

This prize is given annually to a student who has produced an outstanding thesis in theoretical physics. Established in 2018, this prize honors the memory of Robert F. Christy, former provost and professor of theoretical physics at Caltech.

2025 Nicholas Zhao Rui

DONALD S. CLARK MEMORIAL AWARD

This award is given to two juniors in recognition of service to the campus community and academic excellence. Preference is given to students in the Division of Engineering and Applied Science and to those in chemical engineering. The awards honor the work of Professor Clark, class of 1929, both in the field of engineering and in his service to the Alumni Association.

2024 Sophia A. Elam, Payal Nital Patel

CMS AND IST GRADIENT FOR CHANGE AWARD

The CMS and IST Gradient for Change Awards honor students, postdocs, staff, and faculty in the Caltech community who demonstrate exceptional efforts to make Caltech and/or the broader scientific community a more diverse, equitable, and inclusive environment. The awards recognize and highlight individual contributors or small teams who are considered agents of change, community leaders, and/or allies to historically marginalized group(s) in the information sciences, including computer science, applied mathematics, and beyond.

2023 Thierno Hamidou Diallo

DONALD COLES PRIZE IN AERONAUTICS

This prize is given to the graduating Ph.D. student in aeronautics whose thesis displays the best design of an experiment or the best design for a piece of experimental equipment.

2025 Meredith Leigh Hooper, Donner Thomas Schoeffler

FRANCE A. CÓRDOVA GRADUATE STUDENT FUND

This fund provides resources for one to three graduate students annually to support research-related expenses. Each awardee shall be recognized as either a Neugebauer, Garmire, or Tombrello Scholar. Preference shall be given to student(s) studying broadly in areas in which professors Gerry Neugebauer, Gordon Garmire, and Thomas Tombrello made contributions.

2022 Antonio Cuevas Rodriguez, Neugebauer Scholar

2023 Viraj Karambelkar, Neugebauer Scholar

JAMES A. CULLEN MEMORIAL FELLOWSHIP FUND

This memorial fund is awarded annually to a graduate student or students who have demonstrated outstanding academic achievement in physics.

2021 *Jaeha Lee*

2023 *Sophie Rose Hourihane, Vincent Sze Him Lee*

2024 *Isaac Norman Legred*

DEANS' CUP

This award is presented to undergraduates whose concern for their fellow students has been demonstrated by their persistent efforts to improve the quality of undergraduate life and by effective communication with members of the faculty and administration.

2025 *John Emerson Brysacz, Bryan Mickey Wang*

DEMETRIADES-TSAFKA-KOKKALIS PRIZE IN ENTREPRENEURSHIP OR RELATED FIELDS

This prize, awarded annually, recognizes the best business plan or proposal, start-up, thesis, publication, discovery, or related efforts by student(s) in entrepreneurship or related fields at the Institute in the preceding 12 months. This prize is made possible by a gift from Anna Kokkalis Demetriades and Sterge T. Demetriades (Eng. '58).

2024 *Heather Lauren Lukas*

DEMETRIADES-TSAFKA-KOKKALIS PRIZE IN BENIGN RENEWABLE ENERGY SOURCES OR RELATED FIELDS

This prize, awarded annually, recognizes a Ph.D. candidate for the best thesis, publication, discovery, or related efforts in benign renewable energy sources or related fields at the Institute in the preceding 12 months. This prize is made possible by a gift from Anna Kokkalis Demetriades and Sterge T. Demetriades (Eng. '58).

2025 *Nicolas Henry Christianson*

DEMETRIADES-TSAFKA-KOKKALIS PRIZE IN BIOTECHNOLOGY OR RELATED FIELDS

This prize, awarded annually, recognizes a Ph.D. candidate for the best thesis, publication, or discovery in biotechnology or related fields at the Institute in the preceding 12 months. This prize is made possible by a gift from Anna Kokkalis Demetriades and Sterge T. Demetriades (Eng. '58).

2025 *Wenzheng Heng*

DEMETRIADES-TSAFKA-KOKKALIS PRIZE IN NANOTECHNOLOGY OR RELATED FIELDS

This prize, awarded annually, recognizes a Ph.D. candidate for the best thesis, publication, or discovery in nanotechnology or related fields at the Institute in the preceding 12 months. This prize is made possible by a gift from Anna Kokkalis Demetriades and Sterge T. Demetriades (Eng. '58).

2025 Prachi Thureja

DEMETRIADES-TSAFKA-KOKKALIS PRIZE IN SEISMO-ENGINEERING, PREDICTION, AND PROTECTION

This prize, awarded annually, recognizes a Ph.D. candidate for the best thesis, publication, or discovery in seismo-engineering, prediction, and protection at the Institute in the preceding 12 months. This prize is made possible by a gift from Anna Kokkalis Demetriades and Sterge T. Demetriades (Eng. '58).

2025 Taeho Kim

EVERHART DISTINGUISHED GRADUATE STUDENT LECTURER AWARD

This award recognizes graduate students for their exemplary presentation skills and research ability. Awardees participate in the Everhart Lecture Series, a forum that is meant to encourage interdisciplinary interaction among graduate students and faculty, to share ideas about recent research developments.

2025 Nadine Hany Soliman

LAWRENCE L. AND AUDREY W. FERGUSON PRIZE

The Ferguson prize is awarded to the graduating Ph.D. candidate in biology and biological engineering who has produced the outstanding doctoral thesis for the past year.

2025 Aditya Nair

RICHARD FEYNMAN PRIZE IN THEORETICAL PHYSICS

This prize is awarded to a senior on the basis of excellence in theoretical physics.

2025 Vinicius de Alcantara Nevoa

HAREN LEE FISHER MEMORIAL AWARD IN JUNIOR PHYSICS

This recognizes a junior physics major who demonstrates the greatest promise of future contributions in physics.

2024 Adele Muhoza Basturk, Andres Nava, Aditya Raghav Srinivasan

HENRY FORD II SCHOLAR AWARD

This award recognizes either the engineering students with the best academic record at the end of the third year of undergraduate study or the engineering students with the best first-year record in the graduate program.

2024 *Chu Xin Cheng, Ethan Zachary Dawn, Subin (Rachael) Kim, Markus Paul Zhi Guang Lendermann, Miguel Omar Liu-Schiaffini, Jean-Sebastien Paul, Pablo Backer Peral, Dominic Minh Phung, Ayush Anitej Varshney*

JACK E. FROEHLICH MEMORIAL AWARD

This award, established by the family and friends of the late Jack E. Froehlich (B.S. '47, M.S. '48, Ph.D. '50), who did his undergraduate and graduate work at Caltech and was later the project manager for Explorer I for the Jet Propulsion Laboratory, provides an award to one or two juniors in the upper 5 percent of their class who show outstanding promise for a creative professional career. The recipients are selected by the deans and the Undergraduate Academic Standards and Honors Committee.

2024 *Chu Xin Cheng*

DR. ALLEN AND CHARLOTTE GINSBURG SCHOLARS

This award is given to rising seniors demonstrating academic excellence and outstanding leadership skills as well as a commitment to the visual and performing arts program.

2024 *Eric Paul, Luke Frederick Zhou*

BARRY M. GOLDWATER SCHOLARSHIP

This scholarship program honoring Senator Barry Goldwater was designed to foster and encourage outstanding students to pursue careers in the fields of mathematics, the natural sciences, and engineering. The Goldwater Scholarship is the premier undergraduate award of its type in these fields.

2024 *Jessie Low Gan, Miguel Omar Liu-Schiaffini, Sophia Jingyi Wu*

GPS AWARD FOR ACADEMIC EXCELLENCE IN RESEARCH

Awarded to a GPS graduate student for outstanding research achievements.

2023 *Emily Claire Geyman, Yan Yang*

2024 *James William Atterholt, David Brooking Bonan*

GRADUATE DEAN'S AWARD

This award is given to a Ph.D. candidate or candidates who, throughout their graduate study at the Institute, have made great contributions to graduate life and whose qualities of leadership and responsibility have been outstanding.

2025 *Evan Haze Nunez-Cravin*

GEORGE W. AND BERNICE E. GREEN MEMORIAL PRIZE

This prize, awarded annually, recognizes an undergraduate student in any class for original research, an original paper or essay, or other evidence of creative scholarship beyond the normal requirements of specific courses. The student is selected by the deans and the Undergraduate Academic Standards and Honors Committee.

2025 *Emma Xueqian Isella*

DAVID M. GRETHER PRIZE IN SOCIAL SCIENCE

The prize rewards outstanding performance and creativity by a Caltech undergraduate who completes one of the social science options. The prize was established by Susan G. Davis in recognition of David M. Grether's contributions to econometrics and experimental economics and his service to the Division of the Humanities and Social Sciences. The prize is awarded annually by a committee of social science faculty.

2024 *Alec Z Sandroni*

2025 *Sulekha Kishore*

THE CALTECH Y LUCY GUERNSEY AWARD

This award recognizes graduate and undergraduate students who have provided exceptional service to the Caltech Y and/or the community. Recipients are selected based on their active involvement in Caltech Y service projects, demonstrated leadership in community and volunteer service efforts, and a strong spirit of service.

2023 *Danika Katherine Nimlos*

THE CALTECH Y GUNILLA HASTRUP ADVENTURE AWARD

This award was created by family and friends in memory of Caltech Y board member Gunilla Hastrup, and supports Caltech students in exploring their cultural roots or a culture different from their own to deepen their understanding of identity and community.

2022 *Marcos Felipe Nazareth Gallo*

2023 *Andrew Lu, Rajashik Tarafder*

2024 *Genevieve Isabel Gandara, Miguel Omar Liu-Schiaffini, George Louis Ore, Leo Zhang, Luke Frederick Zhou*

2025 *Paulina Maria Naydenkov, Juni Young Hee Polansky, Sydney Charbonneau Vernon*

ALEXANDER P. AND ADELAIDE F. HIXON PRIZE FOR WRITING

The Hixon Prize for Writing was established in 2000 by Alexander P. and Adelaide F. Hixon. The prize will be awarded annually to an undergraduate student for the best composition in a freshman humanities course. The prize is administered by the writing center, and the winner will be chosen by a committee from the humanities division.

2022 *Avirath Sundaresan*

HANS G. HORNUNG PRIZE

This prize is awarded for the best oral Ph.D. defense presentation by a student advised by aerospace faculty. The decision is made by a committee of students who attend all thesis presentations for the year.

2025 *Tanner David Harms*

THE HOUSES AND RESIDENCES IDEA AWARD

The Houses and Residences Award celebrates exceptional individuals who excel in fostering a vibrant and inclusive environment within the houses and residences. Their unwavering commitment ensures that each resident feels a deep sense of belonging and support. These leaders drive positive transformation by nurturing inclusive dialogues and instilling a strong sense of community through their advocacy. Through their efforts, they create an environment where everyone can flourish in houses and residences.

2025 *Sara Razavi*

THE CALTECH Y PATRICK HUMMEL AND HARRY GRAY TRAVEL FUND

Initiated by the Hummel Family to honor Harry Gray, Caltech's Arnold O. Beckman Professor of Chemistry and founding director of the Beckman Institute, this award was established through a generous joint gift from Carla and Paul Hummel, Patrick Hummel, and Shirley and Harry Gray. The fund supports student travel opportunities that promote professional and leadership development while broadening students' perspectives as engaged, responsible citizens of the world.

2022 *Anwesha Das, Sarah Yuan Ni Liaw, Ruchen Pan*

2023 *Wenhao (Jerry) Xuan, Luke Frederick Zhou*

2024 *Jessie Low Gan, Henry Grant Peterson, Michael Arlandres Matsuo Sowell*

2025 *Chelsea Brae Fox , Arushi Gupta, Emma Xueqian Isella, Taylan Kargin*
Sarah Yuan Ni Liaw, Hannah Henning Dion-Kirschner

RICHARD H. JAHNS TEACHING AWARD

The Richard H. Jahns Teaching award is given in recognition of outstanding achievement as a graduate teaching assistant. Dick Jahns got his B.S. and Ph.D. in Geology from Caltech and from 1946–1960 was faculty here. He was known for giving superb lectures, legendary field trips, and spending long hours mentoring students. Dick said, "the most exciting and rewarding aspect of teaching is seeing already able young people come alive intellectually and seeing the emergence in them of a basic drive, enthusiasm, and enjoyment."

2022 *Justin Anh-Khoa Nghiem*

2023 *Juliet Rose Ryan-Davis, Henry Grant Peterson*

2024 *Emily Claire Geyman*

BIBI JENTOFT-NILSEN MEMORIAL AWARD

Family and friends of Bibi Jentoft-Nilsen, class of 1989, have provided this award in her memory. This award recognizes a junior or senior who exhibits outstanding qualities of leadership and who actively contributes to the quality of student life at Caltech.

2025 *Dilichi Obichukwu Nwankwo*

SCOTT RUSSELL JOHNSON PRIZE FOR EXCELLENCE IN GRADUATE STUDIES

This prize is awarded to continuing graduate students for excellence and extraordinary progress in research and/or excellence in teaching in mathematics.

2022 *Jeck Lim*

2023 *Philip Easo, Elliot Gesteau, Thorgal Hinault*

SCOTT RUSSELL JOHNSON PRIZE FOR EXCELLENCE AS A FIRST-YEAR GRADUATE STUDENT

This prize rewards excellence in first-year graduate research in mathematics.

2020 *Jiaxin Zhang*

2021 *Elliott Gesteau*

SCOTT RUSSELL JOHNSON GRADUATE DISSERTATION PRIZE IN MATHEMATICS

This prize is awarded for the best graduate dissertation in mathematics.

2025 *Philip Easo, Elliot Gesteau, Jeck Lim*

KALAM PRIZE FOR AEROSPACE ENGINEERING

This prize, made possible by Dr. Abdul Kalam, the 11th president of India and an aerospace engineer, is awarded to a student in the aerospace engineering master's program whose academic performance was exemplary and who shows high potential for future achievements at Caltech.

2025 Rahul Kumar Yerra

R.K. KAR AWARD FOR RESEARCH IN PHYSICS

This award is given annually to an outstanding graduate student who is exceptional in their physics studies and research (emphasis on condensed matter physics).

2024 Daniel Howard Van Beveren

2025 Mingyao Guo

D. S. KOTHARI PRIZE IN PHYSICS

This prize is awarded to a graduating senior in physics who has produced an outstanding research project during the year.

2025 Adele Muhoza Basturk

JOHN O. LEDYARD PRIZE FOR GRADUATE RESEARCH IN SOCIAL SCIENCE

The prize rewards the best second-year paper by a graduate student in Social Science or Social and Decision Neuroscience. The prize was established by Susan G. Davis in recognition of John O. Ledyard's dedication to developing graduate students as independent researchers and his service to the Division of the Humanities and Social Sciences. The prize is awarded annually by a committee of social science faculty to a sole-authored work.

2022 Ke Shi

MARGIE LAURITSEN LEIGHTON PRIZE

This prize is awarded to one or two undergraduate women who are majoring in physics or astrophysics, and who have demonstrated academic excellence.

2023 Zofia Ewa Adamska

2024 Emily Hu

MARI PETERSON LIGOCKI ’81 MEMORIAL AWARD

This award is given to a student who has improved the quality of student life at Caltech through their personal character. It recognizes the student who provides quiet support and kind encouragement to peers. This fund was established by Mr. Jose F. Helu Jr. (B.S. ’79) to honor the memory of Mari Peterson Ligocki, who possessed these qualities.

2025 Benjamin R Lugo, Aija Washington

GORDON MCCLURE MEMORIAL COMMUNICATIONS PRIZE

This prize is awarded to undergraduate students for excellence in written and oral communication skills. Awards will be given in the following fields: English, history, and philosophy.

2023 Aramis Josephine Mendoza, Lark Mendoza

2024 Sarah Yuan Ni Liaw, Emeka TJ Nkurumeh

2025 Edward Earl Speer

THE HERBERT NEWBY MCCOY AWARD

This award is given to one or more chemistry doctoral students for outstanding contributions to the science of chemistry.

2025 Emily Boyd, Nathanael Parker Kazmierczak

MARY A. EARL McKINNEY PRIZE IN LITERATURE

The Mary A. Earl McKinney Prize in Literature was established in 1946 by Samuel P. McKinney, M.D., of Los Angeles. Its purpose is to promote proficiency in writing. The terms under which it is given are decided each year by the literature faculty. It may be awarded for essays submitted in connection with regular literature classes or awarded on the basis of a special essay contest.

2024 Domani S Sharkey

2025 Chi Lam Cap

MECHANICAL ENGINEERING AWARD

This award recognizes a B.S. candidate in mechanical engineering whose academic performance has demonstrated outstanding original thinking and creativity, as judged by a faculty committee appointed each year by the executive officer for mechanical engineering.

2025 Payal Nital Patel

MERCK INDEX AWARD

This award is given to one or more graduating students who have demonstrated outstanding achievement in the field of chemistry.

2025 *Jessie Low Gan*

JAMES MICHELIN SCHOLARSHIP

Given in memory of geologist James Michelin, who worked in the oil fields of Southern California in the 1930s and dreamed of returning to college at Caltech, this annual prize recognizes one or more undergraduate students for their contributions to the field of geology or geophysics.

2024 *Sangwon Noh*

2025 *Jonathan Edwin Bennett*

NEW HORIZONS AWARD

With the New Horizons Award, the Division of Engineering and Applied Science annually recognizes and honors individuals within the EAS community who have actively contributed to our goal to be a diverse, equitable, and inclusive engineering community. The award is available to members of the EAS community, including current students, postdoctoral scholars, staff, and faculty, whose activities have impact and may include demonstrated leadership, advocacy and community organizing, development of equity and inclusion resources, and engagement in engineering outreach to local schools or communities.

2025 *Kevin Douglas Gauld*

PARK S. NOBEL PRIZE FOR EXCELLENCE IN BIOLOGY AND BIOLOGICAL ENGINEERING

This prize recognizes one or two undergraduate students demonstrating outstanding achievements within the Division of Biology and Biological Engineering at Caltech.

2025 *Emma Xueqian Isella*

ROBERT L. NOLAND LEADERSHIP AWARD

This award is given to one or more undergraduate students who exhibit qualities of outstanding leadership, which are most often expressed as personal actions that have helped other people and that have inspired others to fulfill their capabilities. The scholarship was set up by Ametek in 1978 in honor of its president, Robert L. Noland (B.S. '41), a Caltech alumnus.

2024 *Dilichi Obichukwu Nwankwo*

2025 *Jonathan Ross Booker, Yoyo Benchetrit, Jayden Desaca Nyamiaka, Trinity Meiyan Lee*

DR. NAGENDRANATH REDDY BIOLOGICAL SCIENCES THESIS PRIZE

The Reddy prize is awarded to the graduating female Ph.D. candidate in the Division of Biology and Biological Engineering who has produced the outstanding thesis in the biological sciences or bioengineering for the past year.

2025 Jue Wang

HOWARD REYNOLDS MEMORIAL PRIZE IN GEOLOGY

This prize is awarded to a sophomore or junior who demonstrates the potential to excel in the field of geology and who actively contributes to the quality of Caltech student life.

2023 Sangwon Noh

HERBERT J. RYSER MEMORIAL SCHOLARSHIP

This scholarship is awarded to undergraduate students for academic excellence, preferably in mathematics.

2023 Haydn Campbell Maust

2024 Santiago Thomas Adams, Toyesh Kumar Jayaswal

SANPIETRO TRAVEL PRIZE

This prize is awarded to one or more sophomores, juniors, or seniors to fund an adventurous and challenging summer travel experience that expands the recipients' cultural horizons and knowledge of the world.

2024 Sulekha Kishore, Juni Young Hee Polansky

2025 Miles Owen Clan Jones, Edward Earl Speer, Ryan Benjamin Wong

RICHARD P. SCHUSTER MEMORIAL PRIZE

This prize is awarded to one or more juniors or seniors in chemistry or chemical engineering on the basis of financial need and academic promise.

2025 Paulina Maria Naydenkov, Luke Frederick Zhou

ELEANOR SEARLE PRIZE IN LAW, POLITICS, AND INSTITUTIONS

The Eleanor Searle Prize was established in 1999 by friends and colleagues to honor Eleanor Searle, who was the Edie and Lew Wasserman Professor of History at Caltech. The prize will be awarded annually to an undergraduate or graduate student whose work in history or the social sciences exemplifies Eleanor Searle's interests in the use of power, government, and law.

2023 MohammedSaid Alhalimi

2025 Kexin Feng

ERNEST E. SECHLER MEMORIAL AWARD IN AERONAUTICS

This award recognizes an aeronautics student who has made the most significant contribution to the teaching and research efforts of GALCIT (Graduate Aerospace Laboratories of the California Institute of Technology). Preference is given to students working in structural mechanics.

2022 *Liam Frank Raven Heidt*

2024 *James Francis Ragan III*

2025 *Stephanie Lea O'Gara*

RENUKA D. SHARMA AWARD

This award recognizes a sophomore chemistry major for outstanding performance as a first-year.

2023 *Luke Frederick Zhou*

C. S. SHASTRY PRIZE

This prize is awarded to a sophomore Ph 11 alumnus, majoring in physics, to provide support for a summer research project conducted at Caltech. The winner is chosen based on passion, curiosity, and demonstrated ability.

2023 *Adele Muhoza Basturk*

JOHN STAGER STEMPLE MEMORIAL PRIZE IN PHYSICS

This prize is awarded annually to a graduate student in physics for outstanding progress in research as demonstrated by an excellent performance on the oral Ph.D. candidacy exam.

2024 *Sophie Rose Hourihane*

2025 *Yunfei Wen*

R. BRUCE STEWART PRIZE FOR EXCELLENCE IN TEACHING

This prize is awarded annually to a graduate teaching assistant in physics who demonstrates, in the broadest sense, unusual ability, creativity, and innovation in undergraduate and graduate classroom or laboratory teaching.

2020 *Rajashik Tarafder*

2021 *Daniel Howard Van Beveren*

2023 *Nicholas Zhao Rui*

THE CALTECH Y PAUL STUDENSKI MEMORIAL AWARD

This travel grant is awarded to a Caltech undergraduate who finds themselves at a crossroads and would benefit from time away from the academic community to gain a deeper understanding of themselves and their future plans.

2025 *America Luna Herrera*

STUDENT AND FAMILY ENGAGEMENT (SFE) AWARDS

These awards recognize student leaders who have made a significant impact on their Caltech community by demonstrating their efforts to improve the quality of campus life by displaying effective communication with Caltech administration and their peers. These leaders can be at any student level or within a team and are determined by and at the discretion of Student and Family Engagement. Student and Family Engagement has presented awards such as: Emerging Leader Award, Outstanding Leadership Award, Outstanding Student Club/Organization Award, and the Outstanding Team Award.

2021 *Emily Yishiuan Miaou, Team Award: Science Olympiad*

2023 *Ramona Wanjiru Murugu, Thierno Hamidou Diallo, Emerging Leader Award*

2024 *Lillian Rajsavong Randall, Outstanding Leader Award*

2024 *Sulekha Kishore, Organization/Club Award: Science Olympiad*

2024 *Sophie A. Elam, Emma Xueqian Isella, Outstanding Team Award: 2023-24 IHC*

2025 *Sophia Rose Dalfonzo, Outstanding Leadership*

2025 *Bechtel Peer Advocate Team, Outstanding Team Award*

2025 *Avery Executive Committee (Past Year, 2024–2025), Outstanding Team Award*

2025 *Caltech Hispanic and Latino Association (CHLA), Outstanding Engagement Student Club/Organization Award*

THREE MINUTE THESIS

Originally conceived by the University of Queensland and jointly sponsored by the Caltech Library and the Graduate Studies Office, the Three Minute Thesis (3MT®) competition challenges Caltech graduate students to explain their research in an engaging and clear three-minute talk intended for a non-specialist audience.

2022 *Emily Katherine de Jong, Second Prize*

2023 *Sophie Eve Miller, People's Choice*

2024 *John Monroe Pederson, First Prize; Alexander Viloria Winnett, Second Prize*

2025 *Hannah Henning Dion-Kirschner, First Prize; Michael Christopher Greklek-McKeon Second Prize*

THOMAS A. TISCH PRIZE FOR GRADUATE TEACHING IN COMPUTING AND MATHEMATICAL SCIENCES

The Graduate Teaching in CMS Awards were established in 2016 with a gift from Microsoft and then endowed through the generosity of Thomas A. Tisch (B.S. '61). The prize and honorarium are awarded to a graduate student for outstanding teaching and course development in computing and mathematical sciences. Awardees are selected by a committee of CMS faculty members.

2022 *Ethan Nicholas Epperly, Margaret Katherine Trautner*

2024 *Neehar Kondapaneni, Zihui Wu*

THOMAS A. TISCH PRIZE FOR UNDERGRADUATE TEACHING IN COMPUTING AND MATHEMATICAL SCIENCES

The Undergraduate Teaching in CMS Awards were established in 2016 with a gift from Microsoft and then endowed through the generosity of Thomas A. Tisch (B.S. '61). The prize and honorarium are awarded to an undergraduate student for outstanding teaching and course development in computing and mathematical sciences. Awardees are selected by a committee of CMS faculty members.

2025 *Philippe des Boscs*

CHARLES AND ELLEN WILTS PRIZE

The Wilts Prize is awarded annually for outstanding independent research in electrical engineering leading to a Ph.D. degree. This prize was established in 1992 to honor Charles Wilts, a member of the electrical engineering faculty from 1947–1975, who made substantial contributions to the Department of Electrical Engineering.

2025 *Pranav Dhananjay Kulkarni*

FREDRICK J. ZEIGLER MEMORIAL AWARD

The Fredrick J. Zeigler Memorial Award was established in 1989 to honor Fredrick J. Zeigler, a member of the class of 1976 and an applied mathematics major. This award recognizes an outstanding sophomore or junior in pure or applied mathematics for their excellence in scholarship as demonstrated in class activities or in the preparation of an original paper or essay in any subject area.

2024 *Allen Rao Yang*

Caltech | Alumni

Joy. Anticipation. Relief. Pride. Wonder.

Graduating today, you'll feel many emotions. Congratulations on your achievements at Caltech! As you join our 25,787 alumni, you will bring your talent and perseverance to every ambitious undertaking. Caltech alumni are scientists and engineers, authors and attorneys, teachers and inventors. We are also parents, community leaders, and friends. We bring our unquenchable thirst for knowledge and understanding to every effort.

As the newest alumni, you bridge today's students with the graduates who came before you. We invite you to connect students and alumni with your newly extended networks. Your new connections strengthen the entire community. Fellow alumni are here to support you in finding and forming these opportunities for lifelong impact and friendship. The Caltech Alumni Association (CAA) is honored to connect you with fellow alumni on these journeys. Through programs like the Techer Professional Network, regional events, Tables for Techers, Seminar Day, Alumni Weekend and Reunions, and so much more, the CAA will help you realize the full potential of your extended Techer family, personally and professionally.

On behalf of the Caltech Alumni Association, I welcome you as members of our global alumni community. Visit alumni.caltech.edu to be a mentor, connect with alumni in your area, and bring your energy to Techers around the world.

Dan Liebling, MS (BS '02)
Chair of the Board, Caltech Alumni Association
info@alumni.caltech.edu

ACADEMIC REGALIA AND HOUSE TRADITIONS AT CALTECH

The symbolism in the academic regalia worn by graduates at Commencement dates back many centuries. Although some aspects of the costume vary among academic institutions, many basic elements are similar. The cap or mortarboard is based on the medieval biretta worn by scholars and artists. The gown's cut and velvet trimming indicate academic rank. The doctoral hood may display the academic field of the wearer's degree and the institution from which it was received. In addition, tassels, cords, and medallions denote various honors awarded by the institution or academic societies.

Caltech graduates receiving a doctorate wear a black velvet cap, robes trimmed in blue velvet, and a blue velvet doctoral hood lined in a chevron pattern of orange and white. Those receiving a bachelor's or master's degree wear a simple black gown and black mortarboard or cap.

In addition to these traditional items, an undergraduate may also choose to wear a colored stole to the graduation ceremony. While orange stoles denote Caltech pride, other colors may be chosen to represent the undergraduate's residential affiliation. There are currently eight undergraduate houses at Caltech (**Avery, Blacker, Dabney, Fleming, Lloyd, Page, Ricketts,** and **Venerable**), and three undergraduate residences (**Bechtel, Braun,** and **Marks**). Some of the undergraduate houses also commemorate their house members' graduation with specific celebrations as members walk across the stage and receive their diplomas.

- The students of the **Bechtel**, **Braun**, and **Marks** residences who affiliate with a house may choose to wear that house's tassel or stole.
- A purple stole or a purple and white tassel designates **Avery House**; Avery's house color is purple. Avery members ring triangles (symbolizing their triangular house logo) when graduating members receive their diplomas.
- A silver stole or a black and white tassel designates **Blacker House**; Blacker's house color is black. Blacker members play a recording of an electric saw for their graduating members.
- A green stole or tassel designates **Dabney House**; Dabney's house color is green. Dabney members blow horns or kazoos when their graduates receive their diplomas.
- A red stole or tassel designates **Fleming House**; Fleming's house color

is red. Fleming members ring the Fleming Bell for their graduating members and fire the Fleming Cannon when the Fleming President and two Cannon Masters receive their diplomas.

- A gold stole or a yellow and white tassel designates **Lloyd House**; Lloyd's house color is gold. Lloyd members ring the Lloyd Gong when graduating members receive their diplomas.
- A blue stole or tassel designates **Page House**; Page's house color is blue. Page members ring bells for their graduating members.
- A maroon stole or tassel designates **Ricketts House**; Ricketts's house color is maroon. Ricketts members yell and cheer when their graduates receive their diplomas.
- A navy blue stole or tassel designates **Venerable House**; Venerable's house color is navy blue. Venerable members blow whistles, including train whistles, in honor of graduating members.

GAUDEAMUS IGITUR (LET US REJOICE, THEREFORE)

The song *Gaudeamus igitur* has become an academic standard, sung around the world at graduations and other university ceremonies. Some verses of this anthem go back to 13th-century France, where they appear in a Latin hymn on the transitory nature of life. By the middle of the 18th century, students at German universities had combined the original medieval verses with new ones—including the now famous opening verse that begins *Gaudeamus igitur, juvenes dum sumus* ("Let us rejoice, therefore, while we are young")—to create a song that celebrated youth and the student life, in all of its highbrow (and lowerbrow) aspects. In the mid-19th century, the song crossed the Atlantic to Yale, where still more verses were added for use at academic ceremonies.

Since then, verses have been added or subtracted for different occasions. The song also has been translated into many different languages, sometimes faithfully, sometimes quite imaginatively.

The verses below (which have been translated as closely as possible from Latin into English) combine the youthful energy and irreverent attitude towards authority that characterize Caltech students with a ringing endorsement of the academic enterprise to which they are devoted. The verses celebrate the Institute and the community of scholars—past, present, and future—who have done and will continue to do its work.

Gaudeamus igitur Iuvenes dum sumus. Post iucundam iuventutem Post molestam senectutem Nos habebit humus.	Let us rejoice, therefore, While we are young. After a pleasant youth After a troubling old age The earth will have us.
Ubi sunt qui ante nos In mundo fuere? Vadite ad superos Transite in inferos Hos si vis videre.	Where are they who, before us, Were in the world? Go to the heavens Cross over into the infernal regions If you wish to see them.
Vivat academia! Vivant professores! Vivat membrum quodlibet; Vivant membra quaelibet; Semper sint in flore.	Long live the academy! Long live the professors! Long live each student; Long live the whole community; For ever may they flourish!
Alma Mater floreat, Quae nos educavit; Caros et commilitones, Dissitas in regiones Sparsos, congregavit.	May our Alma Mater flourish, Who taught us; Who gathered together Dear ones and comrades, Scattered in remote places.

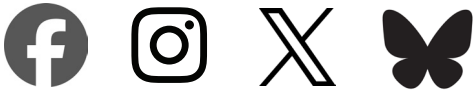
Translation by Warren C. Brown, Professor of History

HAIL CIT

(Caltech alma mater)

arranged by Raymond Burkhart

In Southern California with grace and splendor bound,
Where the lofty mountain peaks look out to lands beyond,
Proudly stands our Alma Mater, glorious to see;
We raise our voices proudly, hailing, hailing thee.
Echoes ringing while we're singing over land and sea,
The halls of fame resound thy name, noble CIT.



JOIN THE CELEBRATION ON SOCIAL MEDIA!

We invite you to celebrate and honor our 2025 graduates. Post your well-wishes, words of wisdom, and congratulations with #Caltech2025 on Facebook, Instagram, X (Twitter), and Bluesky.