

MAY 2022 UNIVERSITY OF MARYLAND COLLEGE PARK



A. JAMES CLARK
SCHOOL OF ENGINEERING



Undergraduate **Honors and Awards** Ceremony



THE A. JAMES CLARK SCHOOL OF ENGINEERING

2022 UNDERGRADUATE HONORS AND AWARDS CEREMONY

Program

Welcome and Opening Remarks

Samuel Graham, Jr., *Dean and Nariman Farvardin Professor*

Presentation of Awards

AEROSPACE ENGINEERING

Alison Flatau, *Professor and Acting Chair*

BIOENGINEERING

John Fisher, *Fischell Family Distinguished Professor & Department Chair*

CHEMICAL AND BIOMOLECULAR ENGINEERING

Peter Kofinas, *Professor and Chair*

CIVIL AND ENVIRONMENTAL ENGINEERING

Natasha Andrade, *Associate Chair for Undergraduate Programs*

ELECTRICAL AND COMPUTER ENGINEERING

Joseph JaJa, *Professor and Chair*

FIRE PROTECTION ENGINEERING

James Milke, *Professor and Chair*

MATERIALS SCIENCE AND ENGINEERING

Ji-Cheng (JC) Zhao, *Chair and Minta Martin Professor*

MECHANICAL ENGINEERING

Patrick McCluskey, *Professor and Director of Undergraduate Studies*

ENGINEERING CAREER SERVICES

Heidi Sauber, *Director*

WOMEN IN ENGINEERING

Paige Smith, *Director*

CENTER FOR MINORITIES IN SCIENCE AND ENGINEERING

Rosemary Parker, *Director*

MARYLAND TECHNOLOGY ENTERPRISE INSTITUTE

Joseph Naft, *Director, Maryland Industrial Partnerships*

A. JAMES CLARK SCHOOL OF ENGINEERING

Kenneth Kiger, *Associate Dean, Undergraduate Student Affairs*

Closing Remarks



AEROSPACE ENGINEERING

2022 HONORS AND AWARDS

The **Department of Aerospace Engineering Gessow Academic Achievement Awards** are presented to those graduating seniors in the department who have attained the highest overall academic average.

*Awarded to **Ezra Bregin, Alexander (Sander) Cochran, and Evan Ruderman***

The **Joseph Guthrie Memorial Scholarships** are presented to those juniors in the department who have attained the highest overall academic average.

*Awarded to **Ryan Ruspil, Anish Sankla, and Matthew Thomas***

The **American Institute of Aeronautics and Astronautics Outstanding Achievement Award** is presented to the student who has made the most outstanding contribution through scholarship and service to the student branch and the department.

*Awarded to **Liam McCue***

The **Department of Aerospace Engineering Chair’s Award** is presented to those students who have made the most outstanding contributions through excellence in academics and outstanding service and leadership to the department.

*Awarded to **Michael Mallamaci, Liam McCue, and Roshni Patel***

The **Women in Aeronautics and Astronautics Award** is presented to the student who has made the most outstanding contribution through scholarship and service to the organization and the department.

*Awarded to **Roshni Patel***

ABOUT THE AWARDEES

Ezra Bregin is a senior aerospace engineering and physics dual degree student with a 4.0 GPA. He is part of the Aerospace Engineering Honors Program and has presented his research on relative state estimation at the American Institute of Aeronautics and Astronautics Region 1 student conference. His passion for space has led him to be actively involved with Terrapin Rockets throughout his time at Maryland and to him being elected president for the 2021-22 academic year. Ezra plans on pursuing his Ph.D. to continue his academic journey.

Sander Cochran is a senior aerospace engineering student with a 4.0 GPA. Last summer, his work as an intern for the Exploration and Space Communications project division at the Goddard Space Flight Center supported ground station testing for the upcoming Artemis missions. He is a member of the University Honors program, a former teaching fellow for the Physics department, and has participated in the Academic Match tutoring program. After graduating, Sander plans to continue working in the space industry in astrody-namics and navigation.

Michael Mallamaci is a freshman aerospace engineering student with a 4.0 GPA. He is a founding member and current community building co-chair of the aerospace department’s student leadership organization, AeroCorps. Additionally, Michael is a member Terrapin Rockets where he works on creating a payload for their competition rocket, and a member of SEDS where he works on their SatFab team designing a high-altitude balloon payload designed to test satellite components.

Liam McCue is a junior aerospace student on the aeronautical track with a minor in general business, and is a member of the University Honors College. He has been a member of Nerspace Balloon Payload Program, First Year Innovation and Research Experience, and the Collective Dynamics and Control Laboratory. Currently, Liam is an intern for the Naval Air Warfare Center Aircraft Division (NAWCAD) at Patuxent River.

Roshni Patel is an aerospace engineering student who is minoring in project management. She is a member of the Science, Technology, and Society Scholars (STS) program. Her most meaningful experience is being the president of the Women in Aeronautics and Astronautics chapter, an organization dedicated to empowering marginalized genders in the field. She has been a teaching fellow for courses in aerospace engineering and her Scholars program. Outside of mentoring, Roshni is involved with research at the Alfred Gessow Rotorcraft Center. Following graduation, she will be working at the Aerospace Corporation and hopes to pursue a master’s degree.

Evan Ruderman is a senior aerospace engineering student with a 4.0 GPA. He is currently co-oping part-time at NASA’s Jet Propulsion Laboratory, where he will work after graduation as an operations systems engineer on the Perseverance Rover mission. He is a founding member of the UMD Gemstone project, Team Autocycle. Evan has previously contributed as an intern to aerospace projects including the James Webb Space Telescope, Starship, Psyche, and Europa Clipper.

Ryan Ruspil is a junior aerospace engineering student minoring in robotics & autonomous systems. Ryan is a Staff Sergeant in the Air Force, which he joined in 2016, serving for four years as a Cryptologic Language Analyst before being selected to finish his bachelor’s degree. He previously earned an Associate of Arts in Mandarin Chinese from the Defense Language Institute. Ryan is a volunteer with Special Olympics Maryland (SOMD) and arranged for Fort Meade service members to assist with many SOMD events. After graduation, he will be commissioning as an officer in the Air Force.

Anish Sankla is a junior aerospace engineering student with a 4.0 GPA. He is a member of the aerospace honors program, researching and developing liquid bi-propellant rocket engines under the guidance of Dr. Christopher Cadou. Anish also helped found SEDS@UMD, a club on campus promoting space-based technical projects and is leading their liquid rocket team in developing a 350lb thrust rocket engine. This summer, he will intern as a mechanical engineer at Venturi Astrolab, a startup developing commercial planetary rovers.

Matthew Thomas is a junior aerospace engineering student with a 4.0 GPA. He is a member of the University Honors Program and the Aerospace Engineering Honors Program. Matthew is the president of SEDS@UMD, a club dedicated to the development of space-based engineering projects, such as CubeSats, liquid rocket engines, and satellite hardware. He has interned at the Army Research Laboratory and MIT Lincoln Laboratory, and plans to intern with Starfish Space this upcoming summer. Outside of his academics, Matthew is also an active member of UMD Club Boxing.



BIOENGINEERING

2022 HONORS AND AWARDS

The **Fischell Department of Bioengineering Outstanding Junior Award** is presented on the basis of outstanding academic achievement and contributions to the department by a junior.

*Awarded to **Pavan Bhat** and **Anjali Gajendiran***

The **Fischell Department of Bioengineering Outstanding Senior Award** is presented on the basis of academic achievement and contributions to the profession and the department by a senior.

*Awarded to **Yusuf Mastoor***

The **Fischell Department of Bioengineering Outstanding Research Award** is presented on the basis of significant contributions to research, the department, and the field of bioengineering.

*Awarded to **Erik Vaughan***

The **Fischell Department of Bioengineering Outstanding Citizen Award** is presented to an excellent student who has contributed significantly to the community, department, university, and profession.

*Awarded to **Ezra Cho***

The **Fischell Department of Bioengineering Outstanding Leadership Award** is presented to an excellent student who has shown exemplary leadership within the community, department, university, and profession.

*Awarded to **Elizabeth Kinnard***

ABOUT THE AWARDEES

Pavan Bhat is a junior bioengineering student, a Banneker/Key Scholar, and a member of both the QUEST Honors Program and the Integrated Life Sciences Honors College. He is an active member of the UMaryland iGEM Team and the Terps Racing Formula Electric (EV) Team. He is also a Clark School Ambassador and an Honors Ambassador, and served as the Scholarship Chair for the Tau Beta Pi Engineering Honors Society. In the future, Pavan hopes to work in the pharmaceutical industry.

Ezra Cho is a senior bioengineering student minoring in statistics with a 4.0 GPA. He is a Banneker/Key Scholar, a member of the Integrated Life Sciences Honors program, and vice president of competitions for the UMD chapter of the Biomedical Engineering Society. Ezra has been an undergraduate teaching assistant for the lab component of the Cell Biology and Physiology course for the past four semesters, and worked on the SNPs3DProfile pipeline under Dr. John Moulton at the Institute for Bioscience & Biotechnology Research. He has been accepted to Boston University for graduate school where he hopes to continue his studies towards a Ph.D.

Anjali Gajendiran is a junior bioengineering and Germanic studies dual-degree student. She is a member of the University Honors Program in the Honors College and the RISE Leadership Academy in the Clark School. Anjali has been an undergraduate teaching fellow for Biology for Engineers and Bioengineering Thermodynamics. This past summer, Anjali was a student leader for the UMaryland iGEM (international Genetically Engineered Machine) team, where she helped lead her team to a gold medal at the iGEM Jamboree for their synthetic biology-based phosphorus recycling project.

Elizabeth Kinnard is a senior bioengineering major in the University Honors program. She has served as an undergraduate teaching fellow for Biology for Engineers, co-founder of the Women in Engineering RISE Summer Research Program, an elementary school math tutor through Maryland Mentor Corps, a First-Year Innovation and Research Experience peer mentor, and co-founder and president of the Maryland Ski Team. After taking a gap year to continue doing tendon research in Dr. Catherine Kuo's lab, she plans to attend medical school.

Yusuf Mastoor is a senior bioengineering student and a member of the Life Sciences Scholars Program. He is developing a contractile artery-on-a-chip in the Vascular Kinetics Lab as a part of the Bioengineering Honors Program. Yusuf is an undergraduate teaching fellow for Biofluids, the chief clinical research teaching assistant for Emergency Medicine Research Associates Program at Prince George's Hospital Center, and treasurer for the campus Student Health Advisory Committee. He is a member of the Omicron Delta Kappa Leadership Society and the Alpha Eta Mu Beta Honor Society. After graduation, Yusuf plans to conduct research at the National Institutes of Health (NIH) before applying to MD/PhD programs.

Erik Vaughan is a senior bioengineering student. His research focuses on developing a model of a human lymphatic vessel in Dr. Katharina Maisel's lab, and recently he presented his research at the Society of Biomaterials conference in Baltimore. Erik is a member of the Gemstone Honors College where he studies gene editing techniques for rare diseases. He is also a site leader with One Tent Health, a D.C.-based nonprofit that provides a range of health services to the community. Erik will be working at the National Institutes of Health (NIH) as a post-baccalaureate fellow before applying to medical school.



CHEMICAL AND BIOMOLECULAR ENGINEERING

2022 HONORS AND AWARDS

The **David Arthur Berman Memorial Award** is presented to the student majoring in Chemical and Biomolecular Engineering with the highest cumulative scholastic average at the end of the first semester of his or her junior year, and who has been elected to (or has been contacted by and is pursuing election to) Tau Beta Pi.

*Awarded to **Benjamin Ruggeri***

The **Department of Chemical and Biomolecular Engineering Outstanding Junior Award** is presented to a department junior for academic excellence.

*Awarded to **Reese Barrett***

The **Department of Chemical and Biomolecular Engineering Outstanding Senior Award** is presented to graduating seniors for scholarship, leadership, and service to the department.

*Awarded to **Jonathan Chang and Long Chen***

The **Department of Chemical and Biomolecular Engineering Student Service Award** is presented to graduating seniors in the department for outstanding service in the department.

*Awarded to **Sumi Mondal and Cassandra Smith***

The **Department of Chemical and Biomolecular Engineering Chair’s Award** is presented for excellence in academics, outstanding service to the department, or leadership in the department.

*Awarded to **Bianca Meinhardt***

ABOUT THE AWARDEES

Reese Barrett is a junior chemical engineering student minoring in sustainability studies. She is a Banneker/Key Scholar and a member of the University Honors program, and the recipient of the Ernest F. Hollings National Scholarship, which is awarded by the National Oceanic and Atmospheric Administration. Reese is a member of the university’s American Institute of Chemical Engineers chapter and is an undergraduate researcher in the chemical and biomolecular engineering department’s Environmental Aerosol Research Laboratory. She plans to pursue a Ph.D. upon graduation.

Jonathan Chang is a senior chemical engineering student. In the American Institute of Chemical Engineers, he has served as vice president, and is currently the president of the Chem-E-Car competition group, leading the battery design team. Along with battery design for ChemE Car, he is a member of the Albertus lab where he is helping study the thermal safety of lithium-ion batteries. He has also been a teaching fellow for multiple courses, such as Thermodynamics I and Separations. Upon graduation, Jonathan will begin his career at ExxonMobil in Texas.

Long Chen is a senior chemical engineering student with a 3.94 GPA. He is a member of Omega Chi Epsilon (OXE), the chemical engineering honor society, and the American Institute of Chemical Engineers (AIChE). In addition, he is treasurer and kinetics sub-team leader of the ChemE Car team. He was an undergraduate teaching fellow for several chemical engineering courses for five semesters.

Bianca Meinhardt is a senior chemical engineering student. She is a member of the University Honors Program and Omega Chi Epsilon (OXE), the Chemical Engineering Honor Society. In the American Institute of Chemical Engineers (AIChE) UMD chapter, she was the 2021 chair of the Regional Student Conference. After graduation, Bianca will be in the Technical Management Development Program at E & J Gallo Winery.

Sumi Mondal is a senior chemical and biomolecular engineering student with a minor in Sustainability Studies. She was president of the American Institute of Chemical Engineers (AIChE) in 2020-21 and is still an active member of the board. In previous years, she was on the Women In Engineering Student Advisory Board (WIESAB). Sumi is also an undergraduate teaching assistant for the chemical engineering department. After graduating, she has accepted a position with MPR Associates, an engineering consulting company based in Alexandria, VA.

Benjamin Ruggeri is a senior Banneker/Key Scholar studying chemical engineering with a 3.97 GPA. In his college career, Ben has participated in Tau Beta Pi, Advanced Cybersecurity Experience for Students, ChemE Car, Terps Against Hunger, and the Alumni Cup. In Engineers Without Borders, Ben took part in building a water chlorination model for a village in Nicaragua, and he is currently serving as president of Omega Chi Epsilon. Ben has accepted a position with ExxonMobil’s Research & Engineering division in Houston, Texas.

Cassandra Smith is a senior chemical engineering student with a 3.91 GPA. She is a member of the University Honors Program and president of the UMD chapter of the American Institute of Chemical Engineers (AIChE). She is currently an undergraduate teaching fellow for Transport Phenomena II. Cassandra has accepted a position as an engineering consultant for M.P.R Consultants in Alexandria, VA this upcoming fall.



CIVIL AND ENVIRONMENTAL ENGINEERING

2022 HONORS AND AWARDS

The **Department of Civil and Environmental Engineering Outstanding Junior Award** is presented to a department junior who has demonstrated outstanding academic achievement.

*Awarded to **Harry Hall***

The **Department of Civil and Environmental Engineering Outstanding Senior Award** is presented to a department senior for outstanding scholastic achievement.

*Awarded to **Aashini Patel***

The **Chi Epsilon Outstanding Senior Award** is presented to a department student for demonstrated leadership and service to the student engineering community.

*Awarded to **Shivani Patel***

The **American Society of Civil Engineers Outstanding Senior Award** is presented to a senior member for outstanding scholastic achievement and for significant service to the chapter.

*Awarded to **Lilia Yousefian***

The **CEE DEI Service Award** is presented to a department student for demonstrated service and activism in the areas of diversity, equity, and inclusion to the student engineering community.

*Awarded to **Haroon Farrukh***

The **Robert L. Morris Award in Environmental Leadership** is given to a department junior or student who has demonstrated through extracurricular activities a commitment to environmental stewardship, ethical engineering practice, or sustainable technology.

*Awarded to **Miranda Pierce***

The **Department of Civil and Environmental Engineering Chair’s Award** is presented to a department student for the most significant contribution to the department.

*Awarded to **Gerald Brown***

ABOUT THE AWARDEES

Gerald Brown is a senior civil engineering and an alumni of College Park Scholars Environment Technology and the Economy program. As a member of Black Engineers Society he has served as a senator, secretary, and currently serves as president. He is a teaching fellow for Introduction to Engineering Design in the Keystone program. Gerald also works as a resident assistant and the team lead for the Terrapin Technology Store. He is looking to start work towards his professional engineer license and join the water resources industry.

Haroon Farrukh is a senior pursuing civil and environmental engineering on water resources and environmental track. Haroon is undergraduate representative for the Diversity, Equity and Inclusion Committee for the civil and environmental engineering department and a ClarkLeader. His current research works with Dr. Deb Neimeir and focuses on how the discriminatory zoning of the Jim Crow era continues to impact minorities in Lubbock, TX, leading to environmental and economic setbacks for marginalized communities. He is also an active member of Social Justice for Palestine, American Society of Civil Engineers, and Chi-Epsilon.

Harry Hall is a junior studying civil and environmental engineering. He is the undergraduate tutor for the Engineering for Sustainability course and is a member of the executive board of the newly formed student organization, Terps For Bike Lanes. A nontraditional student, Harry spent three years teaching history in a secondary school in Palestine before returning to education. He hopes to specialize in hydrologic engineering and watershed management.

Shivani Patel is a senior civil and environmental engineering major on the structural and geotechnical engineering track. She is currently the president of Chi Epsilon and coordinator of Suit Up & Be Civil (SUBC) for the American Society of Civil Engineers, and organized both the Chi Epsilon Civil Engineering Career Fair and SUBC. She is also a mentor coordinator for the Women in Engineering Mentoring Program and a sister of Alpha Omega Epsilon. Shivani will go to Cornell University after graduation to pursue a master’s degree in engineering management.

Aashini Patel is a senior studying civil engineering. Currently, Aashini is the vice president for Chi Epsilon and the secretary for American Society of Civil Engineers. She is a mentor for the Women in Engineering program and a sister of Alpha Omega Epsilon. Aashini is also an undergraduate research assistant for the geo-environmental lab and was awarded an ASPIRE fellowship for her research. During the summer of 2021, she worked as an engineering orientation advisor for the Clark School. After graduation, Aashini will pursue a master’s degree in geosystems engineering from University of California, Berkeley.

Miranda Pierce is a junior civil and environmental engineering student with a 3.81 GPA. She is a member of the Chi Epsilon honor society and the Clark Scholars Program. Miranda is the current vice president of the University of Maryland chapter of the American Society of Civil Engineers, and an active sister of Alpha Omega Epsilon. Miranda applies her engineering knowledge both in the field through her internships with the Clark Water Group and through her work with Dr. Deb Niemeier on research towards environmental justice.

Lilia Yousefian is a senior pursuing a degree in civil engineering. She serves as president of the American Society of Civil Engineers (ASCE), where she led the chapter in planning the ASCE Region 2 Assembly & the Suit Up and Be Civil Networking event, hosting over 400 professionals, students, and faculty. Lilia is treasurer of the Chi Epsilon Honor Society, a Clark School Ambassador, and a past mentor coordinator for the Women In Engineering program. Lilia has accepted a position at Clark Construction Group and aims to work on green building certifications to grow the sustainable construction industry.



ELECTRICAL AND COMPUTER ENGINEERING

2022 HONORS AND AWARDS

The **Department of Electrical and Computer Engineering Outstanding Academic Performance Award** is presented to a junior for academic excellence.

*Awarded to **Wensen Liu***

The **Department of Electrical and Computer Engineering Service Award** is presented to graduating seniors who have demonstrated exceptional leadership and service to both their fellow students and the department.

*Awarded to **Muhammad (Esa) Adil and Catherine Gao***

The **Department of Electrical and Computer Engineering Chair’s Award** is presented to a senior for outstanding academic performance.

*Awarded to **Caitlin Lee, Sophia Seo, and John Ting**
for electrical engineering*

*Awarded to **Zachary Breit, Daniel De Leon, and Alexander Tran**
for computer engineering*

ABOUT THE AWARDEES

Esa Adil is a senior electrical engineering major with a computer engineering minor. He has been an undergraduate teaching fellow with the electrical and computer engineering department for three years. Esa has also served as a tutor for ENEE140, 205, and 303. Starting last semester, he assumed the role of recruiting assistant to support the department with recruiting and creating materials for teaching fellows. Esa was also awarded the Michael Barr Teaching Fellows scholarship for his teaching and leadership services. After graduation, he will be working in the embedded systems field before starting graduate school.

Zachary Breit is a senior computer engineering major and a Gemstone Honors student. For his Gemstone research, Zach studies the security of biometric authentication with a team of nine honors students. He also conducts research under Dr. Gil Blankenship to develop a robot for transporting surgical equipment inside hospitals. Outside of class, Zach is the Mobile App Lead for Bitcamp, a 1000-person hackathon at UMD, where he oversees a small team of mobile developers. After graduation, Zach plans to work as an embedded computer engineer at Key Tech Inc., a medical device company in Baltimore.

Daniel De Leon is a senior computer engineering student. He has a 3.99 GPA and was a member of the College Park Scholars program. During his first summer as an engineering student, Daniel conducted research at the Information Technology Laboratory within the National Institute of Standards and Technology (NIST). For his second internship, he worked virtually on AI research at UMD’s Applied Research Laboratory for Intelligence and Security (ARLIS). Last summer, Daniel interned for a government contractor developing a software application. He plans to work for a software company following graduation and may pursue a graduate degree in the future.

Catherine Gao is a senior electrical engineering student. She served as the president of IEEE @ UMD, and is a member of the ECE Undergraduate Affairs Committee and Eta Kappa Nu Honor Society. Catherine is a mentor in the ECE Peer Mentorship Program, as well as serving the IEEE Region 2 as Student Representative, where she organized activities and advocated for over 2,600 IEEE student members in Region 2. She was also a member of the Technica hackathon organizing team and an Honors Ambassador. Catherine will be joining NVIDIA as a patent engineer after graduation and plans to attend law school in the future to pursue patent law.

Caitlin Lee is a senior electrical engineering student. She is an undergraduate teaching fellow and was a tutor for the Electric Circuits course in the electrical and computer engineering department. Caitlin has also been a session leader for Differential Equations through the Guided Study Sessions program. She is a member of the Gemstone program on Team MIND, working on addressing the ethical challenges of medical AI. After graduation, Caitlin will be working at Key Tech in Baltimore, MD.

Wensen Liu is a junior mechanical and electrical engineering student. He is a member of the Gemstone Honors Program as part of team BCIPRO, which seeks to develop a non-invasive, brain-computer interface controlled prosthetic device. He is also the lab coordinator for the Instructional Fabrication Lab at Terrapin Works being primarily responsible for providing design and manufacturing advice to student teams and research groups, as well as guiding Terrapin Works as an organization. Wensen plans for his career to be in robotics and autonomous systems research and development and hopes to make robots ubiquitous.

Sophia Seo is a senior electrical engineering student. Sophia is an active member of Tau Beta Pi, in which she stays connected with fellow engineers. She currently researches the rapidly growing field of human-robot interaction in the Intelligent Servosystems Laboratory. The culmination of this project will award her Clark School Honors. Sophia will remain committed to excellence in her new position at Northrop Grumman and in graduate studies in the near future.

John Ting is a senior electrical engineering student with a 3.991 GPA. He is a member of Team GECKO in the Gemstone Honors Program. As a member of Team GECKO, John conducts research on the fabrication of soft, magnetically controllable films. In the coming fall, he plans to pursue a Ph.D. in electrical engineering.

Alexander Tran is a senior computer engineering student with a 3.97 GPA in the Advanced Cybersecurity Experience for Students honors college program. He is an Honors Ambassador and has served as a mentor for ClarkWELCOME and Clark COMMUNITY as well as vice president of IEEE @ UMD. He has completed internships at Johns Hopkins University Applied Physics Laboratory and Amazon. After graduation, Alexander will join Amazon in Seattle as a software development engineer.



FIRE PROTECTION ENGINEERING

2022 HONORS AND AWARDS

The Salamander Honor Society presents the **Robert J. Taylor Academic Achievement Award** to the department junior with the highest GPA.

*Awarded to **Liora Mervis***

The **Society of Fire Protection Engineers Outstanding Senior Award**, sponsored by the society’s Chesapeake Chapter, is presented to the department senior with the highest GPA.

*Awarded to **Ted Gladkov***

The **NFPA Ambassador Award**, sponsored by the NFPA (National Fire Protection Association) acknowledges students who have served as exemplar FPE Ambassadors, going above and beyond to promote the major.

*Awarded to **Thomas Rotello***

The **Department of Fire Protection Engineering Chair’s Award** is presented to the department student or students who made the most significant contribution to the Department mission through their service and leadership during the year.

*Awarded to **Thomas Roche***

ABOUT THE AWARDEES

Ted Gladkov is a fire protection engineering senior with a 4.0 GPA. He is originally from Belarus, but calls Lanham, MD his home. Ted works at the UMD FireTEC - Fire Testing and Evaluation Center. In his free time, Ted enjoys home improvement projects and is passionate about travel and cultural tourism.

Liora Mervis is a junior fire protection engineering student with a minor in sustainability studies. She is a member of the University Honors Program and has worked as a head coach for the university’s Math Success Program. Liora has participated in research studies within the fire protection engineering department with a wide-range of focuses. She has assisted in studies related to fires in micro-gravity environments and the impacts of fires in informal settlements. Liora plans to continue her studies toward earning a graduate degree through the Clark School’s combined B.S./M.S. program.

Thomas Roche is a senior fire protection engineering student with a 3.988 GPA. He is the treasurer for the Society of Fire Protection Engineers student chapter and president of the UMD Salamander Honorary Society chapter. He is a teaching fellow for Numerical Methods with MATLAB in the fire protection engineering department. Thomas has been accepted to graduate school to begin his master’s degree in fire protection engineering at UMD with the John Bryan GRA award.

Thomas Rotello is a senior fire protection engineering student with a 3.5 GPA. He is a Subtractive Manufacturing Technician and lab coordinator with Terrapin Works, an Ambassador for the department of fire protection engineering, and a Firefighter/ EMT at the College Park Volunteer Fire Department. After graduation, Thomas plans to pursue a master’s degree in fire protection engineering at UMD.



MATERIALS SCIENCE AND ENGINEERING

2022 HONORS AND AWARDS

The **Department of Materials Science and Engineering Chair’s Outstanding Senior Award** is presented to a graduating senior for outstanding scholarship, leadership and service to the department.

*Awarded to **Eleanor Grosvenor, Robert Meloni, and Logan Saar***

ABOUT THE AWARDEES

Eleanor Grosvenor is a materials science and engineering major from Houston, Texas. She serves on the executive board of the Materials Engineering Society and is a member of Theta Tau. She serves as a Clark School Ambassador and is a member of Omicron Delta Kappa. Eleanor leads a published research team within the Gemstone Honors Program and has been a teaching assistant and co-director of the Gems Camp Planning Committee. She also works as a researcher at the Bioinspired Advanced Manufacturing Lab and NIST. After graduation, Eleanor will continue her research in environmental health applications of polymers as a Ph.D. student.

Robert Meloni is a senior materials science and engineering student and completed his citation in the Virtus Living Learning Program. He has participated in engineering competitions such as the Northrop Grumman A.I. Challenge and the Alumni Cup. Last summer, Robert was a process engineering intern at Textron Systems, and he continued to work there throughout the fall and spring semesters as a co-op. He has accepted a position at Textron Systems following graduation and plans to earn a master's in systems engineering.

Logan Saar is a senior materials science and engineering student with a 3.95 GPA. He is a member of the University Honors Program and is a teaching fellow for several classes within the MSE department. Logan has held internships at the National Institute of Standards and Technology (NIST) and the U.S. Consumer Product Safety Commission, where he has conducted research into the use of autonomous experimentation and machine learning to accelerate the discovery of new materials. He has been accepted into the B.S./M.S. program at UMD where he will pursue his master's in materials science and engineering.



MECHANICAL ENGINEERING

2022 HONORS AND AWARDS

The **Academic Achievement Award** is presented to juniors in Mechanical Engineering who have excelled academically to obtain a cumulative grade point average of 4.0.

Awarded to Giuse Pham, Audrey Rappaport, and Evan Wozniak

The **Chairman’s Award** is presented to graduating Mechanical Engineering seniors for excellence in academics, outstanding service to the department, or outstanding leadership in the department.

Awarded to Kieren Barvenik, Hailey Brennan, William Gerst, Sarah Noland, Carolyn Payne, and Kyle Pichney

ABOUT THE AWARDEES

Kieran Barvenik is a senior mechanical engineering student with a 4.0 GPA. He has held internships at both BAE Systems and Northrop Grumman. Throughout his junior year, he functioned as the powertrain subgroup leader for Terps Racing Baja. He has been a teaching fellow in both Computing Fundamentals for Engineers and Introduction to Materials Engineering. Currently, he is conducting research on soft robotics under the supervision of Dr. Eleonora Tubaldi, wherein he is gathering experience relevant for his future path pursuing a Ph.D.

Hailey Brennan is a senior mechanical engineering student. She is a member of the QUEST Honors program and is president of the Mechanical Contractors Association of America (MCAA) and Construction Management Association of America (CMAA) student chapters. Hailey has helped lead the University of Maryland chapter to two top ten bid proposals for the MCAA student competition in the past three years. Hailey is excited to begin her career as an energy engineer with Spectrum Energy following graduation.

William Gerst is a senior with a 4.0 GPA, pursuing a double degree in mechanical engineering and computer science. He is a member of University Honors and has worked with Terrapin Works as part of the software design team. William also participated in the International Collegiate Programming Contest (ICPC) regional championships in 2018 and 2019. He was a teaching assistant for CMSC250 in fall 2020 and spring 2021, and he currently works as an intern for Ellucian. After graduation, William plans to join Thales as an associate software engineer.

Sarah Noland is a senior mechanical engineering major. She leads the Women In Engineering Student Advisory Board as chair and has served in several leadership positions on the Society of Women Engineers Executive Board. Sarah is a member of University Honors, QUEST, ASME, and PTS Mechanical Engineering Societies, and is a proud alumna of the Flexus Program. She currently works as a Clark School Ambassador and as an intern for the Women In Engineering Program. After graduation, Sarah will start her career as a mechanical engineer at ExxonMobil in Joliet, Illinois.

Carolyn Payne is a senior mechanical engineering student. She is a member of the Clark Scholars Program and the Honors College. She is serving her second year as president of the American Society of Mechanical Engineers UMD chapter. Carolyn is a member of Tau Beta Pi Engineering Honor Society, Pi Tau Sigma Mechanical Engineering Honor Society, Alpha Omega Epsilon sorority, Clark School Ambassadors, and a mentor through the ClarkLEAD and WIE programs. Carolyn will be working for GE Renewable Energy and beginning her studies for a master’s in engineering at Georgia Tech after graduation.

Giuse Pham is a junior in mechanical engineering with a 4.0 GPA. He is a part of the Clark Scholars Program, and an active member of two engineering honors societies, Pi Tau Sigma and Tau Beta Pi, where he has served as the lounge chair for Tau Beta Pi. He has also helped manufacture parts with the Terps Racing EV ergonomics sub-team. Currently, Giuse is participating in a spring-summer co-op with Northrop Grumman’s Launch Vehicles Division in Chandler, AZ.

Kyle Pichney is a senior mechanical engineering student with a 4.0 GPA. He is a graduate of the Entrepreneurship and Innovation Honors College and a part of the Maryland Robotics Center Pathways program. As a part of the Collaborative Controls and Robotics Laboratory, Kyle has worked to design, build, and test a novel actuation system for applications of multi-agent robotics. He is also the current vice president of the Leatherbacks Combat Robotics club. Following graduation, Kyle plans to attend graduate school to earn a master’s degree specializing in robotics and mechatronics.

Audrey Rappaport is a junior mechanical engineering student and a member of the QUEST Honors program. The QUEST program has allowed her to explore subjects outside of her major, her favorite being a data analysis class using Python. In previous summers, she has been a near-peer mentor for middle and high school students at the GEMS Camp, and an intern at Agentis Air, an air purifier startup. This summer, Audrey will intern at Root3 Labs, a medical and defense devices development company.

Evan Wozniak is a junior mechanical engineering student with a 4.0 GPA. He is a member of the University Honors program, earning his honors citation in 2021. Evan has two years of summer internship experience at Booz Allen Hamilton, where he has worked in teams to develop software that assists in reverse engineering and malware analysis. In the future, Evan plans to attend graduate school at UMD and work towards a master’s degree in business and management.



ENGINEERING CAREER SERVICES

2022 HONORS AND AWARDS

The **Outstanding Engineering Co-op/Intern Award** is presented to selected students who have demonstrated exceptional work performance, strong academic achievement, and remarkable potential for a successful career while participating in a cooperative education or internship opportunity.

*Awarded to **Gustavo Lang, Jr., Diana Liepinya, and Cindy Liu***

ABOUT THE AWARDEES

Gustavo Lang, Jr. is an aerospace engineering student who has been co-oping at Apple since the summer. He has significantly raised our expectations of what an intern can accomplish. He is incredibly smart, thorough, and puts in long hours. He is also gregarious and curious and asks important questions, to ensure that he understands the project. But most importantly, Gustavo is a self-starter. He always tries to deliver his work on time and does not need supervision. Many of our full-time employees could learn more from him in this regard. Gustavo clearly has an amazing future ahead of him.

Diana Liepinya is a materials engineering student who co-oped at MPR Associates during the spring semester. Diana's most striking quality is how well rounded she is as an engineer and as a person. She has strong technical/problem solving abilities, outstanding communication skills, and true leadership potential. It is rare for an intern to perform exceptionally well in all three of these areas. Her other top qualities include: intellectual curiosity, confidence, integrity, and workload management. It was incredibly rewarding to be her supervisor and see the positive impact she made on those around her.

Cindy Liu is a bioengineering student who interned at the Food and Drug Administration. She underwent a rigorous evaluation but her intelligence, academic standing, demeanor, communication skills, and inquisitiveness placed her at the top. These abilities were evident throughout her internship. Cindy was able to work independently and in a team environment. As our day-to-day needs changed, she exhibited flexibility in adapting to her new tasks. Due to her diligence, an abstract for our project was accepted by a scientific conference. She is one of the best interns I have mentored.



WOMEN IN ENGINEERING

2022 HONORS AND AWARDS

The **Women in Engineering Service Award** is presented to the engineering student who has demonstrated outstanding service to the Women in Engineering Program.

*Awarded to **Lilia Yousefian***

The **Women in Engineering Leadership Award** is presented to the engineering student who has demonstrated leadership, engagement, and impact to Women in Engineering Program initiatives and student organizations.

*Awarded to **Erika Maher***

The **Women in Engineering Advancement Award** is presented to engineering students who have demonstrated exceptional dedication to social change, advocacy, and community service on behalf of the Women in Engineering Program (WIE). This award recognizes the students’ lasting contributions which advance and expand the reach of the WIE Program to support all students within the A. James Clark School of Engineering.

*Awarded to the RISE Research Summer Program Team of **Elizabeth Kinnard, Emily Leo, Catherine Lewis, and Rebekah Schrader***

ABOUT THE AWARDEES

Elizabeth Kinnard is a senior bioengineering major in the University Honors program. She has served as an undergraduate teaching fellow for Biology for Engineers, co-founder of the Women in Engineering RISE Summer Research Program, an elementary school math tutor through Maryland Mentor Corps, a First-Year Innovation and Research Experience peer mentor, and co-founder and president of the Maryland Ski Team. After taking a gap year to continue doing tendon research in Dr. Catherine Kuo’s lab, she plans to attend medical school.

Emily Leo is a senior bioengineering major with a 3.9 GPA. She is a member of the Design Cultures & Creativity program, QUEST, and RISE. She is co-president of Ballet Company M, a Women in Engineering (WIE) Program intern, a resident assistant, and a researcher in the Kuo lab. She is actively involved in the Society of Women Engineers, Alpha Omega Epsilon, the Student Alumni Leadership Council, Tau Beta Pi, and Omicron Delta Kappa. She has led the WIE peer mentor program, founded a summer program for prospective students, and coordinated Discover Engineering. Following graduation, she will be working as a process engineer at CRB.

Erika Maher is a junior aerospace engineering student. She serves as president of the Society of Women Engineers (SWE) and has mentored several students through the SWE/WIE Mentorship Program. Erika is a member of Alpha Omega Epsilon. She has also served on the Flexus & Virtus Programming Board, and was a subgroup lead for Engineers Without Borders. She has worked on several different research projects on campus, most recently Dr. Christopher Cadou’s Gas Turbine/Solid Oxide Fuel Cell Hybrid project. During the academic year, Erika works as a Clark School Ambassador and an educator at the Maryland Science Center.

Rebekah Schrader is a senior fire protection engineering student with a 3.77 GPA. She was a member of the FLEXUS Living and Learning Program, is an Ambassador for the fire protection engineering department, and is in the RISE Leadership Academy. With RISE, Bekah conducted research on wildland fires and co-founded a summer program for high school girls interested in engineering research. Bekah is a research intern at the Fire Safety Research Institute (FSRI). Next year, she will return to Maryland as a graduate fellow with FSRI to pursue a master’s degree in fire protection engineering.

Lilia Yousefian is a senior pursuing a degree in civil engineering. She serves as president of the American Society of Civil Engineers (ASCE), where she led the chapter in planning the ASCE Region 2 Assembly & the Suit Up and Be Civil Networking event, hosting over 400 professionals, students, and faculty. Lilia is treasurer of the Chi Epsilon Honor Society, a Clark School Ambassador, and a past mentor coordinator for the Women In Engineering Program. Lilia has accepted a position at Clark Construction Group and aims to work on green building certifications to grow the sustainable construction industry.



CENTER FOR MINORITIES IN SCIENCE AND ENGINEERING

2022 HONORS AND AWARDS

The **Center for Minorities in Science and Engineering Service Award** is presented in recognition of dedicated service to the Center for Minorities in Science and Engineering through commitment to promoting diversity in engineering in the college, the university community, and through the Center’s recruitment, outreach, and retention programs.

*Awarded to **Dahlia Andres** and **Ijeoma Asonye***

The **Louis Stokes Alliances for Minority Participation (LSAMP) Leadership Award** is presented to LSAMP students, who through service and leadership, provide outstanding support to the initiatives and programming of the NSF LSAMP.

*Awarded to **Excel Alale** and **Nicholas Sagun***

ABOUT THE AWARDEES

Excel Alale is a rising senior computer engineering student who transferred from Prince George’s Community College, being awarded the Fredrick Douglass Scholarship. He serves as a peer mentor for LSAMP Transfer Connections and the president of the LSAMP STEM Community. He volunteers at local after-school programs as a coordinator, and serves on web/design teams for his local church and campus fellowship. Excel is also a member of the Hinman CEOs Program, and recently accepted a return offer to Palo Alto Networks for a second summer internship.

Dahlia Andres is a sophomore mechanical engineering student, and is a member of the QUEST Honors Program and the AmazonNext Scholars Pilot Program. In addition, she is currently working as a research assistant on a project in the Bioenergy and Bioprocessing Technology Laboratory where she focuses on converting waste into applicable energy. Dahlia is heavily involved in the Center for Minorities in Science and Engineering where she works as a mentor in the LSAMP Bridge Program, and holds the secretary position in the Society of Professional Engineers.

Ijeoma Asonye is a junior mechanical engineering and creative writing student. She is a student in the QUEST Honors Program. With Flower STEM, she is currently the communications officer along with being the social and cultural impact officer managing their podcast. Ijeoma is the treasurer of the LSAMP STEM Community and serves on the Women in Engineering Student Advisory Board. She was a Project Engineer for CMSE. Along with being a student, she is a student entrepreneur and author, publishing the book, “The Beautiful Math of Coral,” about minorities in STEM and the beauty of math and art.

Nicholas Sagun is a University Honors student majoring in computer science with a minor in human development. He has worked alongside the Center for Minorities in Science and Engineering as both a mentor and the program assistant for the Louis Stokes Alliance for Minority Participation (LSAMP) Bridge program for incoming minority engineering students. Nick currently works as a teaching assistant for the computer science department and volunteers as a youth baseball coach. He has interned as a software developer and hopes to utilize his programming skills in psychological research.



MARYLAND TECHNOLOGY ENTERPRISE INSTITUTE AWARDS

2022 HONORS AND AWARDS

The **Maryland Technology Enterprise Institute Awards** are presented by the Maryland Technology Enterprise Institute to those undergraduate students with the most outstanding performances on a semester-long ASPIRE engineering research project during the past year.

*Awarded to **Moussa Haddad** and **Erfan Jabari***

ABOUT THE AWARDEES

Moussa Haddad is a graduating senior biomedical engineering student. He is an undergraduate researcher in the Mueller Lab which worked on improving a low-cost, reusable laparoscope, used to diagnose cervical cancer in low- and middle-income countries. He served as the president of the Muslim Students Association and was also an undergraduate teaching fellow for Biostatistics in the fall. Moussa is looking forward to making his mark in the bioengineering field after graduation.

Erfan Jabari is a senior bioengineering student. He is a member of the Bioengineering Honors Program and an alum of UMD Scholars. Erfan's work in Dr. John Fisher's Lab has contributed to the publication of a book chapter, review paper, and original research article. In the Guided Studies Program, Erfan led calculus lessons and supervised supplemental STEM lessons. He is also a founder of the Maryland Science Café, a club that organizes literature and discussions for students across campus. After graduation, Erfan plans to continue exploring his research interests in post bachelorette program at the National Institutes of Health.



DEAN’S AWARDS

2022 HONORS AND AWARDS

The **Dinah Berman Memorial Award** is presented to a third-year engineering student who has combined academic and scholastic excellence with demonstrated leadership or service to the Clark School.

*Awarded to **Anish Sankla***

The **A. James Clark School of Engineering Leadership Award** is presented to a student who has demonstrated outstanding leadership to the Clark School in activities that impact all engineering majors.

*Awarded to **Sarah Noland***

The **Kim Borsavage and Pamela J. Stone Student Award** for Outstanding Service is presented to a student who has demonstrated outstanding dedication and service to the Clark School and is a truly unique individual whose contributions to the school exemplify a high level of dedication and service.

*Awarded to **Farida Abubakar***

The **A. James Clark School of Engineering International Leader Award** is presented to a student who through their leadership or service has promoted the international engineering experience on behalf of the Clark School and has demonstrated significant involvement in international engineering activities.

*Awarded to **Mubarak Babalola***

The **A. James Clark School of Engineering Dean’s Award** is presented to a senior for scholastic excellence and demonstrated outstanding service and leadership to the Clark School of Engineering.

*Awarded to **Emily Leo***

ABOUT THE AWARDEES

Farida Abubakar is a civil & environmental engineering student on the project management track. She has worked very closely with the engineering student affairs suite since her freshman year. She works at the Center for Minorities in Science and Engineering to increase minority participation in STEM fields and also serves on the Women in Engineering Student Advisory Board where she helps provide feedback, insight, advice, and support to the Women in Engineering Program. After graduation, she plans on starting off her career as a project engineer with Clark Construction.

Mubarak Babalola is a junior in mechanical engineering and a project management minor. He is a member of the Muslim Students' Association, Engineering Honors, Pi Tau Sigma, and Global Communities Program. In Engineers Without Borders, he is currently the project lead for a sanitation project in Uganda. The project plans on building a futuristic and sustainable latrine system for a school in the country. Throughout his time at the university, he volunteered for different projects and programs, such as Education Day at Lewisdale Elementary School.

Emily Leo is a senior bioengineering major with a 3.9 GPA. She is a member of the Design Cultures & Creativity program, QUEST, and RISE. She is co-president of Ballet Company M, a Women in Engineering (WIE) Program intern, a resident assistant, and a researcher in the Kuo lab. She is actively involved in the Society of Women Engineers, Alpha Omega Epsilon, the Student Alumni Leadership Council, Tau Beta Pi, and Omicron Delta Kappa. She has led the WIE peer mentor program, founded a summer program for prospective students, and coordinated Discover Engineering. Following graduation, she will be working as a process engineer at CRB.

Sarah Noland is a senior mechanical engineering major. She leads the Women In Engineering Student Advisory Board as chair and has served in several leadership positions on the Society of Women Engineers Executive Board. Sarah is a member of University Honors, QUEST, ASME, and PTS Mechanical Engineering Societies, and is a proud alumna of the Flexus Program. She currently works as a Clark School Ambassador and as an intern for the Women In Engineering Program. After graduation, Sarah will start her career as a mechanical engineer at ExxonMobil in Joliet, Illinois.

Anish Sankla is a junior aerospace engineering student with a 4.0 GPA. He is a member of the aerospace honors program, with which he is researching and developing liquid bi-propellant rocket engines under the guidance of Dr. Christopher Cadou. Anish also helped found SEDS@UMD, a club on campus promoting space-based technical projects, and is leading their liquid rocket team in developing a 350lb thrust rocket engine. This summer, he will intern as a mechanical engineer at Venturi Astrolab, a startup developing commercial planetary rovers.



A. JAMES CLARK SCHOOL OF ENGINEERING ADVISOR AWARD

2022 HONORS AND AWARDS

The **Terry Island Outstanding Advisor Award** for the A. James Clark School of Engineering recognizes staff excellence in undergraduate or graduate student advising. This award was established by Professors Emeritus, William Fourney and George Dieter, to recognize the contributions made by the professional advising staff in the Clark School of Engineering. It was later named to memorialize Ms. Terry Island and honors her work as an outstanding advisor, colleague, and administrator at the University of Maryland and in the Clark School.

*Awarded to **Christal Dimas***

ABOUT THE AWARDEE

Christal Dimas is the Coordinator for Retention for Clark Foundation Scholarship Programs in the office of Undergraduate Recruitment and Scholarship Programs. A proud graduate of Brenau’s Women’s College, she earned her B.S. degree in biology before earning a Master of Public Policy from UMD. Christal has worked at the University of Maryland’s Office of Undergraduate Admissions, the Honors College, and the Office of Academic Achievement Programs. Her advising philosophy centers around helping students find authenticity and balance. Christal also serves as a house director for the University’s Sigma Delta Tau chapter and volunteers as an alum with her sorority, Alpha Delta Pi.



CONGRATULATIONS TO ALL THE STUDENTS AND STAFF BEING RECOGNIZED FOR THEIR CONTRIBUTIONS TO THE CLARK SCHOOL, THE UNIVERSITY OF MARYLAND, AND THE CAMPUS COMMUNITY.

The Honors and Awards Ceremony Planning Committee wants to thank the staff and faculty of the A. James Clark School of Engineering, Office of Communications, and Office of the Dean, as well as Dean Sam Graham and Associate Dean Ken Kiger, for their assistance and support. We also thank the family and friends of the awardees for joining us in recognizing these outstanding students.

Front cover photo: **Stephanie S. Cordle**



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