

2020 UNDERGRADUATE
HONORS AND AWARDS
CEREMONY

May 2020
University of Maryland
College Park



Clark School Honorees,

Your career at the University of Maryland is a case study in going above-and-beyond the call.

From classes to labs, individual assignments to complex team projects, your dedication demonstrates that one engineer makes a difference: You have impacted your peers and, at the same time, improved the world.

Congratulations on behalf of the Clark School's faculty and staff. We are proud to honor and applaud your accomplishments.

We also want to acknowledge your family and friends: You helped make this day possible, offering encouragement when our students needed it most. We appreciate your support of them and the University of Maryland.

Working with students like you, we have built the Clark School into one of our country's top engineering schools. Our success has four cornerstones: excellence in teaching, research, entrepreneurship—and public service. As Clark School engineers, we emphasize the importance of "Mpact," focusing our talents and energy on innovations that have the potential to benefit the lives of others.

Your award acknowledges your commitment to that ideal. You may never know all of the lives you have touched but you have contributed to the Clark School, your community and our nation through your academic scholarship, service and leadership.

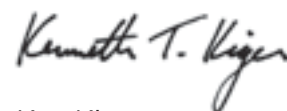
The coronavirus pandemic is an inflection point in our history. What we are experiencing right now is changing our world, from how we spend time with family to how we work—and what we produce with that work. Who better to dream up and design the fundamental elements of this new world—from energy and healthcare to transportation and national security—than Clark School engineers? If anyone can lead us, it is you.

As you advance in your career, remember to stay focused on the ultimate goal of improving the world we share. You are among the Clark School's best and brightest. We look forward to your continued success.

Sincerely,



Robert Briber, *Interim Dean*
A. James Clark School of Engineering
Professor, Department of Materials Science
and Engineering



Ken Kiger, *Professor*
A. James Clark School of Engineering
Associate Dean of Undergraduate Programs

Program

Welcome and Opening Remarks

Rob Briber, *Interim Dean*

Presentation of Awards

AEROSPACE ENGINEERING

Norman Wereley, *Chair*

BIOENGINEERING

John Fisher, *Chair*

CHEMICAL AND BIOMOLECULAR ENGINEERING

Peter Kofinas, *Chair*

CIVIL AND ENVIRONMENTAL ENGINEERING

Charles Schwartz, *Chair*

ELECTRICAL AND COMPUTER ENGINEERING

Joseph JaJa, *Chair*

FIRE PROTECTION ENGINEERING

James Milke, *Chair*

MATERIALS SCIENCE AND ENGINEERING

JC Zhao, *Chair*

MECHANICAL ENGINEERING

Balakumar Balachandran, *Chair*

ENGINEERING CAREER SERVICES

Heidi Sauber, *Director*

WOMEN IN ENGINEERING

Mary Bowden, *Acting Director*

CENTER FOR MINORITIES IN SCIENCE AND ENGINEERING

Rosemary Parker, *Director*

MARYLAND TECHNOLOGY ENTERPRISE INSTITUTE

Joseph Naft, *Director*

A. JAMES CLARK SCHOOL OF ENGINEERING

Kenneth Kiger, *Associate Dean, Undergraduate Student Affairs*

Closing Remarks

2020 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 **Eric Greenbaum and Zachary Lachance***

The **Robert M. Rivello Scholarship Award** and the **Joseph Guthrie Memorial Scholarships** are presented to those juniors in the department who have attained the highest overall academic average.

*Awarded to **Ian Down, Niloy Gupta, and Kyle Spawn***

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 **Quinn Kupec***

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

*Awarded to **Quinn Kupec, Julia Mittelstaedt, and Amanda Wilmot***

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 **Julia Mittelstaedt***

ABOUT THE AWARDEES

Eric Greenbaum is a senior aerospace engineering student with a 3.99 GPA. He is a member of the University Honors program. Eric has held internships with Northrop Grumman and Bell Helicopter, and he was the Powertrain Mechanical Design Lead on UMD Loop. Eric is currently completing research studying the feasibility of orbital maneuvers of an autonomous spacecraft orbiting Enceladus, one of Saturn's moons. He is also a teaching fellow for the Space Flight Dynamics course and an active Clark School Ambassador. Eric has been accepted to UMD for graduate school to begin his studies towards a masters in science.

Zach Lachance is a senior aerospace engineering student with a 3.99 GPA. He is a member of both the University Honors program and the Aerospace Honors Program. Additionally, he is the lab director and a researcher for UMD NearSpace, a weather ballooning research team. He has also been a teaching fellow for the Keystone Program's thermodynamics course. Zach volunteers as a mentor for the Introduction to Aerospace Engineering class project and he has also been a calculus II tutor. After graduation, he plans to pursue a career in space exploration.

Ian Down is a junior in aerospace engineering with a 3.985 cumulative GPA. He is a member of the Aerospace Honors Program and is currently working on his honors thesis on structural connectors and their application to in-space assembly in the Space Systems Laboratory. He has completed the First Year Innovation and Research Program (FIRE) in the Autonomous Systems Stream, working on autonomous plant pollination payloads and deployment strategies for commercial drones. Ian is also a member of UMD Men's A Club Ultimate.

Niloy Gupta is a junior, double majoring in aerospace engineering and mathematics, with a 4.0 GPA. He is an alumnus of the Entrepreneurship and Innovation Honors Program and was on the ex-ABC undergraduate research project where he developed the flight systems for a novel, fixed-pitch, electric, coaxial helicopter. He is an officer for both the Tau Beta Pi and Sigma Gamma Tau engineering honor societies, serving as the Webmaster and Public Affairs Officer respectively. Niloy is also a member of UMD's Design Build Fly competition team and currently doing research on active flow control devices.

Kyle Spawn is a junior aerospace engineering student with a minor in Russian Studies. He is a member of the University Honors program and the Aerospace Engineering Honors Program. Kyle has participated in multiple on-campus activities, working on the Terrapin Rocket Team and at Flight Club at UMD, as well as taking part in Honors Research. He has previously worked as a teaching fellow for the Aerospace Engineering department, and as an intern for FlightSafety International. He is pursuing his passion for aviation outside of the classroom by working on earning a private pilot certificate.

Quinn Kupec is a senior aerospace student. He is the chair of the UMD student chapter of the American Institute of Aeronautics and Astronautics (AIAA) and has been involved with the group for the last four years. Quinn conducts research with the Nearspace Balloon Payload Lab on ultra-low ballistic coefficient entry decelerators. Additionally, he is a Clark School Ambassador and was part of the Virtus Program. Currently, Quinn works part-time at a.i. solutions Inc. on their Drone Systems program.

Julia Mittelstaedt is a senior aerospace engineering student. She is the president of Women in Aeronautics and Astronautics, an ARCS Lockheed Martin Scholar, and a member of the University Honors program. She performs research in the Rotorcraft Center's Tilt Rotor Lab under Dr. Anubhav Datta. Currently, Julia is competing in the Vertical Flight Society's 37th Student Design Competition, tasked with designing Leonardo's Aerial Screw. She has interned with Sikorsky in Stratford, CT for the past two summers and recently accepted a position as a Structural Analyst under their FARA Program.

Amanda Wilmot is a senior aerospace engineering student with an international engineering minor. She is a member of the entrepreneurship & innovation, engineering, and Aerospace Engineering Honors programs. Amanda is currently an engineering senator, the Sigma Gamma Tau National Aerospace Honor Society Initiation Officer, and an AIAA Design, Build, Fly subteam lead. Amanda has also been the Women in Aeronautics and Astronautics Outreach Chair. She has been a Flexus, RISE, aerospace, engineering, honors, and study abroad teaching fellow. She has accepted a job at the Naval Surface Warfare Center in Indian Head, Maryland.

2020 HONORS AND AWARDS

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

*Awarded to **Rachel Wills***

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

*Awarded to **Samantha Kraus and Alana Tillery***

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 **Robert Hawkins***

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 **Jules Allbritton-King***

The **Fischell Department of Bioengineering Outstanding Leadership Award** is presented to an excellent student who has contributed many hours of service to others.

*Awarded to **Erin Reilly***

ABOUT THE AWARDEES

Rachel Wills is a senior bioengineering student with a 4.0 GPA. She is a member of the Gemstone Honors Program, where her team's research focuses on developing a haptic feedback system for robotic surgery. She has been a member of the student chapter of the Biomedical Engineering Society (BMES) for four years and served on the board for two years. Rachel is currently on the executive board for her professional sorority, Alpha Omega Epsilon. She also served as the undergraduate teaching fellow for Biomechanics last semester. After graduation, she will be pursuing a position as a clinical trial coordinator at Merck.

Samantha Kraus is a junior bioengineering student who is a member of the University Honors program and the Fischell Department Honors Program. She is performing her honors thesis project on nanoparticle delivery for islet transplantation survival in the lab of Dr. Xiaoming He. She is the vice president of academic affairs for the Biomedical Engineering Society chapter of Maryland, a member of Tau Beta Pi and Alpha Eta Mu Beta, a lifelong member of Girl Scouts, and a singer in Femmes de Chanson. She plans to pursue a PhD in biomedical engineering after graduation.

Alana Tillery is a junior bioengineering student and a Louis Stokes Alliances for Minority Participation (LSAMP), Entrepreneurship and Innovation Program (EIP), and Banneker/Key scholar. She leads service and outreach for the Biomedical Engineering Society, and academic affairs for the Alpha Eta Mu Beta Bioengineering Honors Society. Alana engages the community with K-12 STEM outreach and blood drives, organizes course support and academic career development for her department, and is an emergency room volunteer. This summer, she will research stroke rehabilitation using neuron-light interactions at the University of Washington. She will pursue an MD-PhD in clinical neural engineering.

Robert Hawkins is a senior majoring in bioengineering and minoring in neuroscience. He is a member of the Integrated Life Sciences and Bioengineering Departmental Honors Programs. His honors thesis is focused on developing a nanoparticle-based method to monitor disease status in patients with obstructive lung diseases. Robert is on the executive board of UMD's founding chapter of Nu Rho Psi and is a coordinator for Terps For Change through which he has tutored local students, and has led the performing of house cleaning and yard work for aging citizens of Washington, DC.

Jules Allbritton-King is a senior bioengineering major. He is conducting research in the Tissue Engineering and Biomaterials Lab for his departmental honors thesis, titled "Gradation of Porcine Bladder ECM in Hydrogels for Chronic Wound Treatment". He is the president and secretary of Alpha Eta Mu Beta (AEMB), the bioengineering honor society, and volunteers in the telemetry ward at Doctor's Community Hospital in Lanham. After graduation, Jules will be working as a post-baccalaureate research fellow at the NIH studying the progression of sclerosing bone diseases, after which he plans to apply for MD/PhD programs.

Erin Reilly is a senior bioengineering student. Involved in Women in Engineering, she served as Flexus vice president and is a member of the Society of Women Engineers and Alpha Omega Epsilon. In the Biomedical Engineering Society, she serves as the student chapter president and previously held positions in professional affairs and service & outreach, creating events to promote career development for undergraduates. Erin is a member of the QUEST Honors Program and is president of the Maryland Eventing Team. She has accepted an offer from the NIH to work in vaccine development after graduation.

2020 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 **Jeremy Rosenblatt***

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 **Noah Eckman***

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

*Awarded to **Katherine Sniezek***

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

*Awarded to **Joshua Fernandes***

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

*Awarded to **Megan Forte***

ABOUT THE AWARDEES

Jeremy Rosenblatt is a junior chemical engineering major and business analytics minor. He is a member of University Honors, the QUEST program, and Tau Beta Pi. He has served on the board of UMD's chapter of the American Institute for Chemical Engineers (AIChE) for the past three years. For almost two years, Jeremy worked as a lab technician in the UMD Bioprocess Scale Up Facility (BSF). Last summer, he interned at Merck & Co and will be returning this summer. Upon graduation, Jeremy plans to pursue employment in the biopharmaceutical industry and/or graduate studies in chemical engineering.

Noah Eckman is a graduating senior in chemical engineering. For three years, he served on the UMD Student Government Association representing Clark School students, including a year as the Speaker of the Legislature. Noah now serves as the Chief of Staff of the SGA and also served as the founder and first chair of the UMD Student Facilities Fund. He has worked in Profs. Michael Zachariah and Ryan Sochol's groups performing research on advanced manufacturing of nanocomposite materials. Noah has been a teaching assistant for CHEM242 and CHBE426. He is currently deciding between Stanford and Caltech to begin his Ph.D. studies.

Katherine Sniezek is a senior chemical engineering student with a 4.0 GPA. She is a member of University Honors and the Omega Chi Epsilon Honors Society. Katherine is also a graduate from the Flexus living and learning program and has volunteered for many Women in Engineering events, including the WIE DREAM conference. She has also served as a teaching fellow for several ChBE courses, and is an undergraduate researcher in the Karlsson Lab. After graduation, Katherine plans to pursue a Ph.D. in Chemical Engineering with research interests in drug delivery and bioengineering/biotechnology.

Joshua Fernandes is a junior seeking a double degree in chemical engineering and applied mathematics. He is a member of the Honors Humanities program within the Honors College and the RISE Leadership Academy in the Clark School. He works in the Laboratory of Molecular and Thermodynamic Modeling, where he conducts research on the properties of lipid membranes. In his free time, he enjoys writing and solving puzzles for the UMD puzzle club.

Megan Forte is a senior chemical engineering student with a minor in sustainability. She is a member of Engineers Without Borders, where she has had roles as project steward, subteam leader, and technical leader. Megan led an assessment trip to a community in Ghana and led the design of a water storage system for a community in Nicaragua. She is the volunteering coordinator for the honor society Omega Chi Epsilon and a member of the RISE leadership program. Megan is currently an intern at the Maryland Clean Energy Center and plans to pursue a career in sustainability and clean energy.

2020 HONORS AND AWARDS

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

*Awarded to **Amanda O'Shaughnessy***

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

*Awarded to **Andrew Grupp***

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

*Awarded to **Samantha Arenberg***

The **Bechtel Award for Outstanding Leadership** is presented to a department student for demonstrated leadership and service to the student engineering community.

*Awarded to **Hillary Griffin***

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

*Awarded to **Erin Stewartson***

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 **Oluwaseun Oluwatimi***

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 **Nicolette Corrao***

ABOUT THE AWARDEES

Amanda O'Shaughnessy is a junior civil engineering major and sustainability minor with a 4.0 GPA. She is an alumna of the DCC Honors and the Flexus Women in Engineering Programs, and is currently in the RISE and Engineering Honors Programs. Amanda is the project lead for a Maryland Sustainability Engineering team working on flooding mitigation and community outreach at a local elementary school. On campus, she conducts research on stormwater management materials in the Inorganic Pollutants lab. She is a 2019 Hollings Scholar and will explore sea level rise community plans at National Oceanic and Atmospheric Administration (NOAA) this summer.

Andrew Grupp is a junior civil engineering student with a 3.946 GPA. He is a member of the Science, Discovery, and the Universe program in College Park Scholars, and a member of the American Society of Civil Engineers. Andrew is a tutor for the Lakeland STARS program and participates in the DiscoverE program with his father, introducing local students to the field of engineering. Andrew participates in both the University Band and the Pep Band at the University of Maryland. He has secured an internship over the summer with NJB Engineering, a Baltimore based civil engineering firm.

Samantha Arenberg is a senior civil and environmental engineering major who is also in the University Honors program. Currently an ambassador for the School of Engineering, she has had the privilege of working for Forrester Construction on the site of an assisted living facility in Gambrills, Maryland, and for ExxonMobil on their campus in Houston, Texas. Samantha is both a member of the American Society of Civil Engineers and Chi Epsilon Honor Society, while also playing on the Club Quidditch team. She received her LEED Green Associate accreditation and will be taking the Fundamentals of Engineering exam after graduation.

Hillary Griffin is a junior civil and environmental engineering major following the geotechnical and structures track. She is a member of the University Honors program and the Global Fellows program. Hillary is also the vice president of the Engineers without Borders and Maryland Sustainable Engineering student organizations. As a member of these organizations, she has worked on multiple projects teams, and traveled to Peru, Nepal, and most recently, Tanzania. Hillary also works as a Clark School Ambassador and interns for the United States Department of Energy.

Erin Stewartson is a senior civil engineering major with a minor in sustainability. She is a Banneker Key Scholar, co-president of the American Concrete Institute, a Clark School Ambassador, and an NSF Louis Stokes Alliances for Minority Participation (LSAMP) Research Fellow. As a member of the National Society of Black Engineers, she visits high school chapters and shares her passion for engineering. This spring, Erin was honored to be the first to sing the Black National Anthem at a Maryland Basketball game. She plans to obtain her EIT and LEED certification and will pursue a PhD focusing on resilient infrastructure.

Oluwaseun Oluwatimi is a senior in the civil and environmental engineering department. Olu is from Prince George's County and attended Dematha Catholic High School. While in high school, he developed a strong interest in math and sciences which lead him to his pursuit of engineering at the University of Maryland. During his time at UMD, Olu has been a member of the University's football team and interned as a project manager.

Nicolette Corrao is a senior civil engineering student with a focus in structural engineering with a 3.8 GPA. She is president of the American Society of Civil Engineering Student Chapter and vice president of Alpha Omega Epsilon, a sorority for women in STEM. She is involved in the Gemstone Honors Program as a teaching assistant, working in their office, and she started a 1-credit mentoring program. Nicolette is also a Clark School Ambassador and a member of Chi Epsilon, Tau Beta Pi, and Omicron Delta Kappa. She will be working at Bechtel as a structural engineering following graduation.

2020 HONORS AND AWARDS

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

*Awarded to **Mihailo Rancic***

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

*Awarded to **Daniel Klawson and Sara Pohland***

The **Department of Electrical and Computer Engineering Chair's Award** is presented to seniors for outstanding academic performance.

*Awarded to **Aidan Benderly, Sara Pohland, and Edward Salvatierra** for electrical engineering*

*Awarded to **David Hsu, Nikhil Uplekar, and Timothy Thoresen** for computer engineering*

ABOUT THE AWARDEES

Mihailo Rancic is a junior studying both computer engineering and mathematics. He is planning on pursuing a graduate degree and has an interest in Computer Architecture. Last summer, Mihailo was an intern at the NASA Jet Propulsion Lab in California, where he worked on mission planning for the NISAR Satellite. This summer, he will be part of a research program in hardware systems at Carnegie Mellon. On campus, he is part of the leadership team for the electrical and computer engineering peer mentoring program, is the software lead for UMDLoop, and is a teaching assistant for a course in programming languages.

Daniel Klawson is a senior electrical engineering student in the Gemstone Honors Program. He has served as an undergraduate teaching fellow for ENEE101 and ENEE244, spanning six of his eight semesters at Maryland. Daniel was formerly the president of Eta Kappa Nu, the ECE honors society, and has actively served on the executive board for IEEE at UMD as a project chair for the last two years. He plans to continue his electrical engineering studies towards a PhD at UC Berkeley after graduation.

Sara Pohland is a senior electrical engineering student with a 4.0 GPA. Through Gemstone, she developed a haptic feedback system for robotic surgery, while serving as a teaching assistant and steering committee member for Gemstone courses. Within her department, she is a part of the peer mentor leadership team and both the undergraduate and general academic affairs committees. Sara is also a Math Success tutor, a Clark School Ambassador, and a member of Omicron Delta Kappa and Alpha Omega Epsilon. She has conducted research on human robot interaction and safety in reinforcement learning and intends to pursue similar research through a PhD.

Aidan Benderly is a senior electrical engineering student with a 4.0 GPA. He is an active member of the Advanced Cybersecurity Experience for Students (ACES) Community, having completed both the Living-Learning Program and minor. He serves as an Honors Ambassador as well as Captain of the Cyber Competition Team. As a part of the Athletic Bands, Aidan has served as a squad leader for the tuba section since his sophomore year. He has been a teaching assistant for both ACES and ECE classes, as well as an ECE peer mentor. He has had internships at Sensata Technologies, Morgan Stanley, and Cisco Talos. He plans to work as a security engineer at Morgan Stanley in New York after graduation.

Eddie Salvatierra is a senior electrical engineering student with a 4.0 GPA. He is a member of the Honors College Gemstone Program as part of the undergraduate research team, OPTIC, where his team works to develop feasible technology for underwater communications. He is also an undergraduate teaching fellow for ENEE150, Introduction to Computer Programming. After graduation, Eddie will work at the BWI campus of Northrop Grumman.

David Hsu is a senior computer engineering student and is a member of the Design Cultures and Creativity honors program. He was a teaching fellow for Digital Logic Design and a board member of the Taiwanese American Student Association. David is the webmaster for IEEE and the founder of Green Gains Gang, a vegetarian food stand and environmental outreach program. He has accepted a firmware engineering position at Samsara.

Nikhil Uplekar is a senior computer engineering student with a 3.98 GPA and a member of the University Honors program. He has completed internships and co-ops with the Johns Hopkins University Applied Physics Lab, MIT Lincoln Laboratory, and Amazon. Nikhil has also served as an undergraduate researcher at the MEMS Sensors and Actuators Lab on campus, working on biofabrication techniques and microneedles for the development of next-generation vaccines and transdermal delivery platforms.

Timothy Thoresen is a graduating senior who has been studying computer engineering. In the past four years, he has worked in a variety of fields including aerospace, automotive, and finance. When he graduates, Timothy will be heading to New York to start his career.

2020 HONORS AND AWARDS

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 **Madison West***

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

*Awarded to **Shuvam Roy***

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 **Karolyn Steranka***

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 **Emily Dietz***

ABOUT THE AWARDEES

Madison West is a senior fire protection engineering student from Wakefield, RI. She is a member of the women's Ultimate Frisbee team, the Tau Beta Pi honor society, and Theta Tau professional engineering fraternity. Madison is also vice president of the Salamander Honorary Society, and a tutor with CP tutors. She has been working for the Society of Fire Protection Engineers (SFPE) since her freshman year and has helped them update the Human Behavior Guide, SFPE Handbook, and create a database of enclosure fires. After graduation, Madison plans to pursue an M.S. in Reliability Engineering at UMD.

Shuvam Roy is a junior fire protection engineering student with a 4.0 GPA. He is a member of the University Honors program as well as the Alpha Lambda Delta and Phi Eta Sigma (ALDPES) Honors Society. He is a recent inductee of the Salamander Honorary Society. This summer, Shuvam will be interning at Pepco Holdings.

Karli Steranka is a senior fire protection engineering student and the president of the Salamander Honorary Society, placing her in charge of planning the FPE Career Fair. She is a teaching fellow for Human Response to Fire, an upper level FPE course. After graduation Karli is pursuing a masters of science in fire protection engineering at the University of Maryland.

Emily Dietz is a junior fire protection engineering student and is studying abroad at Lund University in Sweden. She is a former member of College Park Scholars and Flexus Living and Learning programs. On campus, she has served as a fire protection engineering ambassador for two years and conducts research through the Psychology Department's Culture Lab. Emily has held two summer internships at Telgian Engineering and Consulting in Wilmington, DE and Burns and McDonnell in Arlington, VA.

2020 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 **Shannon Donaldson***

The **Department of Materials Science and Engineering Outstanding Materials Student Service Award** is presented to graduating seniors for outstanding service to the department, to the student chapter of the Materials Engineering Society, and exceptional advocacy for the students in the department.

*Awarded to **Shannon Flynn***

The **Department of Materials Science and Engineering Student Research Award** is presented to an undergraduate who has demonstrated creativity and scholarship in research.

*Awarded to **Eli Fastow***

ABOUT THE AWARDEES

Shannon Donaldson is a senior materials science engineering student. She is a member of the QUEST Honors program & University Honors. She is a graduate of the Flexus Women in Engineering program where she was social chair and has participated in undergraduate research. As the president of the Materials Engineering Society, she led her team to a first place victory in the Alumni Cup Rube Goldberg competition this year. Shannon is also a top Clark School Ambassador. After graduation, she will start full time at NAVAIR in Southern Maryland doing rewarding work in their polymers and composites branch.

Shannon Flynn is a senior materials science and engineering student. She currently serves as the secretary of both Tau Beta Pi Beta chapter and the Materials Engineering Society, and she is also an active Clark School Ambassador. She has previously served as the Community Service Chair of Tau Beta Pi and as the president of Engineering Playdate. Shannon has participated in the Mighty Sound of Maryland and the Maryland Pep Band for four seasons. She will be employed at the Johns Hopkins University Applied Physics Laboratory working as a Materials and Planetary Protection Engineer after graduation.

Eli Fastow is a senior materials science and engineering student with a minor in nanoscience and technology. As a member of the Gemstone honors program, he has conducted research into the development of novel materials to capture carbon dioxide and published this work in a peer-reviewed journal, *Radiation Research*. Eli has also conducted radiation and polymer science under Professor Al-Sheikhly since the June 2016. He also works as a senior lab manager at Terrapin Works and as a teaching fellow for ENMA301 and ENMA495. He has been accepted to the University of Pennsylvania to pursue a PhD.

2020 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 **Daniel Kirchner, John Lathrop, and Robert Nawrocki***

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 **Kristen Edwards, Charles Grody, Hannah Lobell, Syed Taqui Mahmood, Nathan Raver, Jessica Rosenthal, Mary Smith, and Thomas Streett***

ABOUT THE AWARDEES

Daniel Kirchner is a junior mechanical engineering student with a 4.0 GPA. He is a member of Tau Beta Pi Engineering Honor Society. Daniel works in the Bioinspired Advanced Manufacturing Lab at the University of Maryland under Dr. Ryan Sochol. In the lab, he leads a research team on a project for the United States Navy.

John Lathrop is a junior double major in mechanical engineering and math with a 4.0 GPA. In Engineers Without Borders, he is the Tanzania project lead where he leads a team to improve water filtration systems at rural health clinics. He has served as a teaching fellow for the Dynamics course in the Keystone Program. John is an undergraduate researcher in the Collective Dynamics and Controls Lab and a nuclear reactor operator at the UMD Radiation Facilities. In his free time, he enjoys training for and racing triathlons as the president of UMD Club Triathlon.

Robbie Nawrocki is a junior mechanical engineering student with a 4.0 GPA. He was a member of the Virtus Men in Engineering Living and Learning Community and is in the University Honors program. He currently works as an undergraduate research assistant in the Alfred Gessow Rotorcraft Center and previously worked as an undergraduate teaching fellow for the Computing Fundamentals for Engineers course in the Department of Mechanical Engineering. Robbie has accepted an offer for an internship this summer at Boeing working in Thermoplastic Composite Materials and Fabrication.

Kristen Edwards is a senior mechanical engineering student with a 3.98 GPA. She is a Banneker/Key Scholar, a member of the University Honors program, and a researcher in the Bioinspired Advanced Manufacturing Lab. She is the winner of the Spirit of Maryland Award, as well as a member of the Omicron Delta Kappa Leadership Society, Tau Beta Pi Engineering Honor Society, Theta Tau, and Alpha Omicron Pi. Kristen has been accepted to MIT, UC Berkeley, and Carnegie Mellon University to pursue a PhD in which she aims to advance sustainable energy through machine learning and mechatronics.

Charles Grody is a senior mechanical engineering student with a 3.7 GPA. He is a member of QUEST, the Entrepreneurship and Innovation program, and founder of the water conservation startup Hydraze. He won the 2019 Do Good Challenge Venture category pitching Hydraze's stall-latch activated automatic flushing product, which could save thousands of gallons of water per toilet annually by eliminating unnecessary "phantom flushes" generated by existing flushing products. Charles has accepted a full time offer to work at ExxonMobil after graduation.

Hannah Lobell is a senior mechanical engineering student with a minor in engineering leadership development. She served as the president of the Flexus Living and Learning Community during her sophomore year and is now currently chair of the Women in Engineering Student Advisory Board and the vice president of the Society of Women Engineers. Hannah is also a Clark School and Mechanical Engineering Ambassador, a sister of Alpha Omega Epsilon, a SEEDS mentor, and a member of the RISE program. After graduation, she will begin an operations leadership development program with Medtronic.

Taqui Mahmood is a senior mechanical engineering student minoring in project management, and a 3-time awardee of the Office of Multi-ethnic Student Education (OMSE) Excellence award. He has served as president of the American Society of Mechanical Engineers since 2018, and serves as junior vice president for the mechanical engineering honors society, Pi Tau Sigma. Taqui has held executive roles with Engineers Without Borders where he travelled to Nicaragua for an assessment trip, Pi Sigma Epsilon, a professional business fraternity, and the UMD Model United Nations. After graduation, Taqui plans on entering the workforce before pursuing a graduate degree.

Nathan Raver is a senior mechanical engineering student who has spent all four years in the Center for Engineering Concepts Development, with a focus in engineering for social change. This included examining the social aspects and unintended consequences of engineering design. He also conducted research in electronic waste, which went on to be published in the book, "The True Cost of E-Waste: Current Issues in Electronic Waste." In his service to the department, Nathan has helped organize and coordinate annual fundraising events in which proceeds would go towards departmental scholarships.

Jess Rosenthal is a senior mechanical engineering student with a minor in computer engineering. She is a graduate of the Entrepreneurship and Innovation Honors Program, where she was introduced to UMD's Dingman Center for Entrepreneurship. Through The Dingman Center, Jess became an inaugural member of Ladies First Founders, a program which strives to build a community of women in entrepreneurship. Currently, Jess is the team captain and project manager for Terps Racing's Formula Internal Combustion Engine vehicle. She leads a team to design, build, and race a formula-style car.

Mary Smith is a senior mechanical engineering student in the University Honors and QUEST Honors programs. She is the president of Pi Tau Sigma, vice president of the American Society of Mechanical Engineers, the Mechanical Engineering Alumni Cup Team Captain, an undergraduate teaching fellow for Mechanics I and Thermodynamics, and a Top Clark School Ambassador. She is also a member of Tau Beta Pi, Omicron Delta Kappa, Alpha Omega Epsilon, the Society of Women Engineers, and Terrapin Tap Troupe. After graduation, Mary will be a mechanical engineer at Oceaneering in Hanover, MD.

Thomas Streett is a senior mechanical engineering student with a 4.0 GPA. Thomas is a member of the Alpha Gamma Rho agricultural fraternity. In his free time, Thomas likes to hunt waterfowl, fish, and go backpacking. After graduation, Thomas plans to invest in buy and hold real estate, become financially free by 30, and then spend the remainder of his career fighting climate change in the offshore wind industry.

2020 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 **Matthew Black, Garrett Greenwell, James Hall, and Alison Kriz***

ABOUT THE AWARDEES

Matthew Black is a senior electrical engineering student who worked as a full-time co-op at Harley-Davidson. According to his supervisor, Matt has an outstanding work ethic and the patience to stick with a task until the desired outcome is achieved, driving items to closure. In addition, Matt has a willingness to learn and expand his tool set to further his own development and the program's success. He even extended his co-op to be able to participate in the kick-off of a next generation project. Based on his performance, we offered him a full-time job and are thrilled that he accepted.

Garrett Greenwell is a senior mechanical engineering student who interned at MC Dean. According to his supervisor, Garrett went well above what is expected of an intern, making the workload for his team more manageable. In fact, Garrett was recently in charge of closing a \$2.5 million job. This level of responsibility is rarely given entry-level engineers much less interns. Garrett is a very determined and utilizes a range of skills from critical thinking to interacting with people in the field. We hired 11 interns but only invited two to work throughout the year, Garret was one of them.

James Hall is a junior aerospace engineering student who worked as a full-time co-op at GE Aviation. According to his supervisor, James is smart, driven, loves the industry, and wants to make a difference in the world. His infectious attitude reminded us of why we went into engineering and why we love what we do. James has a natural curiosity and an innate drive to always do a thorough job regardless of the task. We treated him like a short term engineer rather than a student and even at this higher standard, he still went above our expectations. He will always be welcome to work here.

Alison Kriz is a senior materials engineering student who interned for Fourth Dimension Engineering. According to her supervisor, Alison is intelligent, hardworking, meticulous and able to work tirelessly on mission critical tasks. Her ability to adapt, learn new skills, and apply engineering fundamentals makes her an invaluable team member. Her communications to external collaborators and vendors have been concise, clear, and professional while conveying complex engineering concepts and problems. Everything she does is of the utmost quality and we are lucky to have had her on our tea

2020 HONORS AND AWARDS

The **Women in Engineering Service Award** is presented to the engineering student who has contributed most to furthering the advancement of women in engineering.

*Awarded to **Abigail Meyer***

ABOUT THE AWARDEE

Abigail Meyer is a junior mechanical engineering student in the Honors College. She is team captain of the Terps Racing Baja team which designs, builds, and competes in intercollegiate competitions with an off-road race car. Abigail is an active volunteer with the Women in Engineering program focusing on STEM nights for middle school-aged girls. She was a mentor in the SEEDS Mentoring Program and graduated from the Flexus program. Abigail will be interning at Oshkosh Defense this summer in Wisconsin.

2020 HONORS AND AWARDS

The **Center for Minorities in Science and Engineering Director's Award** is presented for excellence in academics, outstanding service to the Center for Minorities in Science and Engineering and a strong commitment to promoting diversity in engineering.

*Awarded to **Erin Stewartson***

The **Center for Minorities in Science and Engineering Leadership Award** recognizes students for their leadership and service, involvement, and impact within a student organization, the initiatives and programs of CMSE, and the university community.

*Awarded to **Mariama Barrie and Tyla Holoman***

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 **Excel Alale and Jada-Mercy Ayebae***

ABOUT THE AWARDEES

Erin Stewartson is a senior civil engineering major with a minor in sustainability. She is a Banneker Key Scholar, co-president of the American Concrete Institute, a Clark School Ambassador, and an NSF Louis Stokes Alliances for Minority Participation (LSAMP) Research Fellow. As a member of the National Society of Black Engineers, she visits high school chapters and shares her passion for engineering. This spring, Erin was honored to be the first to sing the Black National Anthem at a Maryland Basketball game. She plans to obtain her EIT and LEED certification and will pursue a PhD focusing on resilient infrastructure.

Mariama Barrie is a senior bioengineering student with a 3.6 GPA. She is a member of the Gemstone Honors College under Team LYTIC, where she has investigated the use of bacteriophages as a treatment for antibiotic resistant diseases. In the university's Louis Stokes Alliance for Minority Participation (LSAMP) program, she serves as an officer on the LSAMP STEM Student Leadership Board, helping to retain and graduate minorities in STEM. Mariama has served as a mentor to incoming freshman engineering students in the Center for Minorities in Science and Engineering's Summer Bridge Program.

Tyla Holoman is a junior chemical engineering student. She is a Banneker/Key scholar and a member of the Design, Cultures, and Creativity Honors Program. She is also an Honors Ambassador for the Honors College. Tyla is a part of the LSAMP STEM Student Leadership Board and is currently an LSAMP undergraduate research fellow working in the Laboratory for Molecular and Thermodynamic Modeling.

Excel Alale is a student studying computer engineering with a minor in Technology Entrepreneurship. He is a member of the Hinman Entrepreneurs program and a Fredrick Douglass Scholar. He serves as the student program coordinator of LSAMP Transfer Connections Program and is also an Engagement Associate for the Transfer and Off Campus Student Life office. Excel's areas of interest are in computer programming, research, and technology development. He hopes to effect change in the world by modernizing and increasing accessibility of tech, and plans to get a PhD and open a venture.

Jada-Mercy Ayebae is a sophomore civil and environmental engineering major with a minor in Sustainability. She is also in the College Park Scholars: Science and Global Change program. Since her first semester, she has been a campus tour guide. This school year, Jada-Mercy has been doing research through the NSF Louis Stokes Alliances for Minority Participation (LSAMP) undergraduate research program on a project to better understand the effects of mercury contamination from gold mining on native vegetation in the Amazon rainforest. She often volunteers for Women in Engineering as well as the Center for Minorities in Science and Engineering.

2020 HONORS AND AWARDS

A Scholars Program for Industry-Oriented Research in Engineering (ASPIRE) is an Mtech Program that seeks to broaden the educational experience of undergraduate engineering students through direct involvement in real-world engineering projects.

The **Outstanding ASPIRE Student Research Award** is presented by the Maryland Technology Enterprise Institute to undergraduate students with the most outstanding performance on a semester-long ASPIRE engineering research project during the past year.

*Awarded to **Justin Lidard** and **Maeesha Noshin***

ABOUT THE AWARDEES

Justin Lidard is a senior with a 3.99 GPA pursuing a major in aerospace engineering and minor in computer science. Advised by Dr. Derek Paley and funded by the ASPIRE Scholarship, he is currently pursuing departmental honors research, where he developed a control model that allows bio-inspired MAVs to fly more efficiently in extreme environments. In addition to academic research, he has served as an Academic Match group leader and teaching fellow. Justin will continue his aerospace studies as a PhD student at Princeton University.

Maeesha Noshin is a senior bioengineering student. She is a member of the Entrepreneurship and Innovation Program (EIP) in the Honors College and is an undergraduate researcher in Dr. Chris Jewell's lab. In the Successful Engineering Education and Development Program, she mentored engineering students, helping them in academics and involvement with UMD. Through the Jewell Lab, Maeesha is involved with many outreach activities aimed at getting high school students involved with STEM. After graduation, Maeesha will be taking a researcher position at the National Cancer Institute and will be working towards entering an MD-PhD program.

2020 HONORS AND AWARDS

The **Dinah Berman Memorial Award** is presented to a third-year engineering student with a 4.0 grade point average who has combined academic excellence with demonstrated leadership or service to the Clark School.

*Awarded to **Jesse Matthews***

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 **Hannah Lobell***

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 **David Boutin***

The **A. James Clark School of Engineering International Student 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 **Lauren Moyer***

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 **Kristen Edwards***

ABOUT THE AWARDEES

Jesse Matthews is a junior studying chemical and biomolecular engineering and applied mathematics with a 4.0 GPA. He has researched solid polymer electrolytes for lithium ion batteries for the past two years under Dr. Peter Kofinas. He was fortunate to present his research at the 2019 AIChE student conference and mentor four high school students on a summer research project. Jesse is also an undergraduate teaching fellow for Thermodynamics II, a member of the RISE leadership academy, a Clark School Ambassador, and a member of University Honors. He plans on pursuing a PhD in chemical engineering.

Hannah Lobell is a senior mechanical engineering student with a minor in engineering leadership development. She served as the president of the Flexus Living and Learning Community during her sophomore year and is now currently chair of the Women in Engineering Student Advisory Board and the vice president of the Society of Women Engineers. Hannah is also a Clark School and Mechanical Engineering Ambassador, a sister of Alpha Omega Epsilon, a SEEDS mentor, and a member of the RISE program. After graduation, she will begin an operations leadership development program with Medtronic.

David Boutin is a senior electrical engineering major, pursuing minors in technology entrepreneurship and Spanish. He has earned his citation from the University Honors program and the Hinman CEOs living-learning program. David currently serves as the president of Theta Tau and the vice president of corporate affairs for the Society of Hispanic Professional Engineers (SHPE). David has assisted with research for the US Army Research Lab in the Advanced Manufacturing Laboratory. Additionally, he is a Clark School Ambassador and member of the Louis Stokes Alliances for Minority Participation (LSAMP) program and Omicron Delta Kappa.

Lauren Moyer is a senior bioengineering and Germanic studies dual-degree student with a 4.0 GPA. She has been active with the Honors College Honors Humanities, Flexus: Women in Engineering, and Language House living and learning programs. She spent a semester abroad at the Technical University in Munich, Germany, where she studied and interned in a research lab. On campus, she is a peer advisor in Engineering Career Services and treasurer for AEMB Biomedical Engineering Honor Society. Additionally, she was recently inducted into Omicron Delta Kappa for her leadership on campus.

Kristen Edwards is a senior mechanical engineering student with a 3.98 GPA. She is a Banneker/Key Scholar, a member of the University Honors program, and a researcher in the Bioinspired Advanced Manufacturing Lab. She is the winner of the Spirit of Maryland Award, as well as a member of the Omicron Delta Kappa Leadership Society, Tau Beta Pi Engineering Honor Society, Theta Tau, and Alpha Omicron Pi. Kristen has been accepted to MIT, UC Berkeley, and Carnegie Mellon University to pursue a PhD in which she aims to advance sustainable energy through machine learning and mechatronics.

2019 HONORS AND AWARDS

The **Student Advising Award for Professional Staff** in the Clark School of Engineering recognizes staff excellence in undergraduate or graduate student advising.

*Awarded to **Dr. Aileen Hentz***

ABOUT THE AWARDEE

Aileen Hentz is the Program Director for Student Services in the Department of Aerospace Engineering. She oversees student services for both the undergraduate and graduate programs. She truly enjoys advising, engaging, and advocating for students. Aileen received her bachelors in History and Integrated Liberal Studies from the University of Wisconsin-Madison. She later went on to receive her M.Ed in College Student Affairs from Pennsylvania State University and her PhD in the Department of Counseling, Higher Education, & Special Education at the University of Maryland.

2020 HONORS AND AWARDS

Congratulations to all the students 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, the Office of the Bursar, the Office of the Dean, Dining Services, and the Stamp Student Union, as well as Interim Dean Rob Briber, Past Dean Darryll Pines, 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.

*2020 Honors and Awards Ceremony
Planning Committee*

Christal Dimas
Liz Galvin
Aileen Hentz
Becky Kenemuth
Meet Koradia
Matt Laumann
Amanda McClish
Keeley Meier
Nicole Roop
Erin Wessell



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