



College of Engineering and The Order of the Engineer
Awards Induction Ceremony

2024 COLLEGE AWARDS CEREMONY
Tuesday, May 7, 2024

GRAND CHALLENGE SCHOLARS GRADUATES



Nathan LaVoie

Double majoring in Biological Engineering and Mathematics, Nathan will be working for an Environmental Engineering company cleaning up the waters around Coeur D'Alene.



Paetra Morgan

I'm from Idaho Falls and I've always loved the outdoors. I chose chemical engineering because of the broad range of career paths I could pursue. Throughout my time at college, I've been involved in many activities which have shaped my experience. I've had the chance to serve as AIChE president, SWE social media chair, & CoE ambassador team VP and president. I also held leadership roles in my sorority for 3 years and did 1 year of undergraduate research. These experiences contributed to my work as a Grand Challenge Scholar.

I am so grateful for all the opportunities I've had during my time at U of I. The ChE department has been extremely supportive of my growth, and I will miss all the faculty who I've learned so much from. I will be starting my career as a process engineer at Micron this summer, and look forward to seeing where my path leads from there.

ENGINEERING AMBASSADORS

Rookie of the Year

Christina Mai
Cooper Piatt

Legacy Award

Paetra Morgan

Most Outstanding Ambassador

Chelsea Barrera
Kathy Ruiz

Dedicated Influencers

Kaylee Janett
Jaycee Johnson

Brave and Bold Ambassadors

Lydia Beardsley
Amber Graves

Future Inspiration

Gavin Baker

SUSTAINABILITY CHAMPIONS

Lydia Beardsley
Kaitlin Tabaracci

OUTSTANDING GRADUATE STUDENTS



OUTSTANDING MASTER'S STUDENT

Ekow Agyekum-Oduro

Ekow received his Bachelor of Science degree in Chemical Engineering from the Kwame Nkrumah University of Science and Technology, Ghana, in 2021 and proceeded to join the University of Idaho's Chemical Engineering Department in the Fall of 2022 for his master's degree in the same major. Upon joining the department, he has been actively involved in research and teaching activities, serving as both TA and RA. His research is primarily focused on the mitigation of greenhouse gases by their chemical conversion into value-added products using non-thermal plasma technology. Beyond academics, Ekow has played an active role in the engineering community, serving as the vice president of the university's chapter of the National Society of Black Engineers (NSBE). He has since been recognized by the NSBE national body as one of the Fall 2023 BCA Scholars, owing to his great academic and leadership achievements.



OUTSTANDING PH.D. STUDENT

Kaitlin Tabaracci

Kaitlin graduated in Spring 2021 with her Bachelors in Mechanical Engineering. She is now a third year PhD student working to graduate in Spring 2026.

She was a senior capstone TA for two years where she helped guide seniors through their capstone projects. This frequently involved training students in the machine shop and on the laser cutters and 3d printers. This past fall she taught our sophomore level design course, where the students learn about the design process and create an Arduino based electro-mechanical project.

She applied for and was awarded a \$180,00 USDA NIFA pre-doctoral fellowship. She has authored 3 peer-reviewed journal articles with several others currently in the works.

BHANOJI RAO-MYNAM OUTSTANDING GRADUATE STUDENT AWARD IN ELECTRICAL ENGINEERING

Jaz Veach

2024 COLLEGE OF ENGINEERING OUTSTANDING SENIORS



INDUSTRIAL TECHNOLOGY

Christian Roberts

Christian began his path to the bachelor's degree 30 years ago with a certificate of applied science in Radiation Protection from Eastern Idaho Technical College. He has worked in Radiological Controls since that time and is currently employed as a RadCon Supervisor at the Naval Reactors Facility near Idaho Falls. He took his first course at U of I during the Spring 2017 semester and will graduate in Spring 2024. It's been quite the journey but well worth it. I look forward to calling myself a

University of Idaho alumnus.

Christian and his wife Tami have been married for 32 years. They are the proud parents of three daughters, Megan, Abby and Brooklyn, with whom they have shared the joy of learning. Christian enjoys spending time with family, stand-up paddle boarding, fly fishing, and being an amateur chef. He also is a connoisseur of live entertainment and fine adult beverages.



BIOLOGICAL ENGINEERING

Peter Wieber

Peter Wieber grew up in Boise, Idaho and is the third of seven children. He enrolled at the University of Idaho as a National Merit Scholar in pursuit of a degree in Biological Engineering. Following a fun-filled experience in organic chemistry, he added a Chemistry degree to his studies. Although his mentors advised against this, the courses aligned and he completed the additional degree. Outside of his course work, Peter has pursued research including studying modified oligonucleotide probes in Dr. Hrdlicka's lab, designing a bioreactor for the mechanical stimulation of neotendons in Dr. Schiele's lab, and creating a methodology for the extraction and identification of metabolites in barley using GC/MS

under Drs. Kayler and Hrdlicka. When he wasn't rock climbing or in the lab, he provided tutoring for chemistry and engineering courses through the university. In the fall, he will be pursuing a PhD in Biomedical Engineering at Cornell.



CHEMICAL ENGINEERING

Kaylee Janett

Kaylee was born and raised on a hay farm in Royal City, WA, where hard work and problem solving was integrated in her daily life. Loving math and chemistry, Chemical Engineering is a good fit for her.

While attending the University of Idaho she was extremely involved. Holding three executive board positions in her sorority, including being President. She also was a member of the local AIChE Chapter, where she held the positions of Secretary and President. Kaylee attended two SWE national conferences, where she was able to develop hard and soft skills required for industry. She was also an Engineering

Ambassador for three years, where she was able to teach children about the possibilities of STEM careers.

Kaylee enjoys spending time with her family and being outdoors. Upon graduating she will be continuing her work as a Process Engineer.

CIVIL AND ENVIRONMENTAL ENGINEERING

Kyle Schulz

I grew up in McCall, Idaho where I loved to ski hike, and camp. I also am an avid hockey goalie who plays for a local recreation team every week.

Through my time at the University of Idaho, I have taken a wide variety of classes in civil engineering with a specialty in environmental engineering. Additionally, I have also worked as an Undergraduate researcher in Dr. Coat's wastewater laboratory.

I have an internship this upcoming summer in Helena, Montana with Great West Engineering, and I will be continuing my education by starting my master's degree in water resources at the University of Idaho next fall.

COMPUTER ENGINEERING

Joshua Jacobson



COMPUTER SCIENCE

Nyah Nelson

Nyah will be graduating with a Bachelor's of Science degree in Computer Science with minors in Mathematics and Spanish. During her undergraduate experience, she has been a member of Delta Gamma sorority, a tutor at the Computer Science Assistance Center, and a mentee in the SWE-INL Mentorship Program. Nyah chose computer science due to her love of math and curiosity to solving problems. She has participated in many undergraduate projects and has excelled in her academics. After taking numerous technical electives, she has become interested in artificial intelligence and data science and wishes to continue studying these topics in the future.

After graduation, she will return to her hometown Boise and begin to apply for jobs in the tech industry with a goal of securing a position as a data scientist.



COMPUTER SCIENCE

Jenna-Luz Pura

Jenna-Luz Pura is graduating Summa Cum Laude with a major in Computer Science and a minor in Mathematics. She has always loved solving problems and working with computers, so a career in software engineering was an obvious choice for her. During her undergraduate education, Jenna found a passion for embedded systems and web development. She will be continuing her education in computer science this fall at the University of Idaho with an emphasis in robotics and artificial intelligence.



CYBERSECURITY

Hunter Squires

Hunter started his collegiate journey as a Mechanical Engineering major in 2020, but quickly realized that he didn't actually like math that much (it was Calc 2), and changed majors to Cybersecurity. For the past 4 years Hunter has gained skills in software engineering, networking, and industrial control systems security. Highlights of his time at U of I include developing penetration testing labs, building an industrial control system testbed, and discovering that he does still like math, just not Calc 2. In his spare time Hunter likes playing board games, chilling with his wife Alexis and cat Morgan, and exploring personal projects that he might even finish one day.



ELECTRICAL ENGINEERING

Simon Gaete

Simon Gaete grew up in Coachella Valley, California. After three semesters at his local community college, Simon transferred to U of I in the spring of 2022 to pursue a degree in electrical engineering. Throughout his time at U of I, he has thoroughly enjoyed the classes and experiences that the department offers as well as working with fellow students on various projects.

Outside of school, he has worked as an intern at Schweitzer Engineering Laboratories for the past year and a half, learning new skills for protection and automation in the power industry. Simon will graduate in

December of 2024 and plans to continue his education through graduate school while beginning his career as an engineer.

Simon deeply values the time he has spent with his exceptional professors and collaborative schoolmates. He is profoundly grateful for the unwavering support of his family, friends, and partner, all of whom he attributes his success to.

ELECTRICAL ENGINEERING

Tristan Denning



MECHANICAL ENGINEERING

Aleczander Smart

I first joined the University in 2017. Seven years later, two-degree switches, and one dropout later I've finally made it. It has been a long road with many twists and turns, but I wouldn't change a thing about it. Everyone's path is different and mine just happened to be a little less direct than most. The people I've met, friends I've made, and lessons I've learned while at the University was worth all the time it took to get here and more.

Along the way I've served as a University Climbing Club Officer. Helped mentor the next generation of mechanical engineering students. Tutored as a Think Tank Engineer. Helped create and host on campus events. Spent way too many late nights in the GJ computer labs. And learned that it is never too late to pursue higher education.



MECHANICAL ENGINEERING

Jacob Liedle

Jacob Liedle is from Kenmore, Washington, a city just outside of Seattle. Jacob has been interested in engineering and aviation since a young age. He came to the University of Idaho because of the strong and approachable faculty, accessible tuition rates, and small class sizes. In his time at the University of Idaho he has been able to grow his passion for mechanical engineering through the amazing instruction given by the Mechanical Engineering faculty.

After graduation he will continue the culture of innovation and growth that he learned as a Vandal when he starts working for the Air Force as a civilian. He will be a Test Engineer for the subsystems of various aircraft. While excited to start this new chapter, Jacob will always look back fondly on the time he spent at the University of Idaho. Go Vandals!



MECHANICAL ENGINEERING

Josiah Widmayer

Josiah Widmayer graduated in December with a degree in mechanical engineering. He grew up in northern Idaho and has always been passionate about design and manufacturing. After high school, he graduated from North Idaho College's machine and CNC technology program and spent a few years working as a machinist and CNC programmer. He then decided to pursue a degree in mechanical engineering. During his studies at the University of Idaho, he served as an academic mentor in several classes and helped develop the UI machine shop training program. During his academic career, Josiah worked as an intern at American Fuel Resources and later with the U.S. Army Corps of Engineers in their hydropower engineering program. Eventually, his passion for design and

manufacturing led him to pursue a capstone design project sponsored by Nightforce Optics to help automate an assembly process. Following his graduation, Josiah is now working for Nightforce Optics as a Manufacturing Engineer.



DRS. EDWIN & SUSAN ODOM OUTSTANDING STUDENT IN MECHANICAL ENGINEERING AWARD

James Adams

James enrolled in Mechanical Engineering at the University of Idaho with the goal of entering the commercial spaceflight industry. He joined the Vandal Atmospheric Science Team, contributing to high-altitude balloon payloads through CAD modeling, 3D-printing, and composites, eventually becoming Aero-Mechanical Team Lead.

James mentored the SolidWorks class for 3 semesters. He is grateful to Dr. Joel Perry, Dr. Daniel Robertson, and his fellow mentors for their support; and to the students, as

he learns more about SolidWorks through interacting with them.

This summer, James will intern at NASA Ames, contributing to the TES-22 CubeSat design, which a University of Idaho Capstone team developed the science payload for. He will return to the University of Idaho in Fall 2024, to begin a Master of Science in mechanical engineering with Dr. Kamal Kumar. James hopes to progress the university's involvement in aerospace engineering through graduate research and continued involvement in student teams.

DRS. EDWIN & SUSAN ODOM OUTSTANDING STUDENT IN MECHANICAL ENGINEERING AWARD

Luke Presta



Luke graduated high school in 2019 before attending Spokane Falls Community College for three years, earning his associate degree in mechanical engineering. He then heard about the University of Idaho through past classmates whom he had kept in contact with and decided that he was going to finish his academic career as a Vandal.

Following his junior year, he was fortunate enough to get an internship at Nightforce Precision Optics where he was placed in their Research & Development division. He enjoyed his time there so much that he applied for and was offered a full-time position as a Mechanical Design Engineer.

Luke is incredibly grateful for everything that his faculty, friends, and family have done for him throughout his undergraduate journey, and he couldn't have done it

without them. He will continue to be a proud Vandal for the rest of his life and cherish the memories he made during his time in Moscow.

2024
COLLEGE OF ENGINEERING EXPO AWARD WINNERS

BEST OF SHOW

Electrolysis for Sustainable Generation

Destinee Ditton - Chemical Engineering
Aaron Goeckner - Chemical Engineering
Grace James - Chemical Engineering
Nick Knowles - Chemical Engineering
Donald Macdonald - Chemical Engineering

Ember Generator for Forest Fire Simulation

Jackson Coleman - Mechanical Engineering
Caleb Hanson - Mechanical Engineering
Aleczander Smart - Mechanical Engineering
Peter Wieber - Biological Engineering

Relocation Guidance System for C-Arm Medical Imaging

Hailey Faith - Biological Engineering
Hunter Holbrook - Biological Engineering
Turner Zischka - Mechanical Engineering
Kyle Fiske - Mechanical Engineering
Toby Mclenon - Computer Science
Alphonse Crittenden - Computer Science

BEST TECHNICAL PRESENTATIONS

Redesigning Thain and 10th Intersection in Lewiston, Idaho

Wolfgang Beier - Civil Engineering
Sandra Faulkner - Civil Engineering
Tim Reed - Civil Engineering
Ethan Von Bargaen - Civil Engineering

The Sustainable Application of a Pacific Northwest Biochar Off-Gas Stream

Kendall Reeder - Chemical Engineering
Travis Kerr - Chemical Engineering
Ashley Keeley - Chemical Engineering
Kristian Jacobson - Chemical Engineering
Luke Zrodlo - Chemical Engineering

Modeling Cybersecurity Threats With a Ferris Wheel

Hunter Squires - Computer Science
Sean Devine - Computer Science
Karina Permann - Computer Science
Matthew Neel - Computer Science
Zherong Qian - Computer Science

The University's First Foray into CubeSat Payload Development

Nathan LaVoie - Biological Engineering
Lyna Tran - Mechanical Engineering
Sydney Munson - Mechanical Engineering
Conner Wiench - Computer Science
Dre Mata - Electrical Engineering
Lucien Lee - Computer Science

Skin Friction Rivet Analysis Using Oil Film Interferometry

Bradley Hille - Mechanical Engineering
Garrett Green - Mechanical Engineering
Jared Nelson - Mechanical Engineering
Hayden Jacobson - Mechanical Engineering

Vertically Opening Forklift Cab Door Window

Cameron Kaminski - Mechanical Engineering
Alex Bailey - Mechanical Engineering
Hunter Higginbotham - Mechanical Engineering
Khaled Alamoudi - Mechanical Engineering

BEST BOOTH PRESENTATIONS

Liberty Park Terrace Apartments Phase II

Tommy Dittman - Civil Engineering
Gabe Brandt - Civil Engineering
Archie Clark - Civil Engineering
Noah Hatstrup - Civil Engineering

Smart Plank Inspection and Navigation for Timber Evaluation and Recognition

James Lasso - Computer Science
Jordan Reed - Computer Science
Dan Blanchette - Computer Science
Brian Healy - Mechanical Engineering

Empowering Health Through Design: ML Solutions for Breast Cancer Early Detection

Jackson Baldwin - Computer Science
Nyah Nelson - Computer Science
Sihan Wu - Computer Science
Bryan Frahm - Computer Science

INL Uranium, Glass & Dust Separation

Isaac Corgatelli - Mechanical Engineering
Emily Mack - Mechanical Engineering
Joseph Norman - Mechanical Engineering
Ying Yang - Electrical Engineering

No Maintenance Bushing

Carlson Wurster - Mechanical Engineering
Jason Jerke - Mechanical Engineering
Casey Lemon - Mechanical Engineering
Ethan Overstreet - Mechanical Engineering

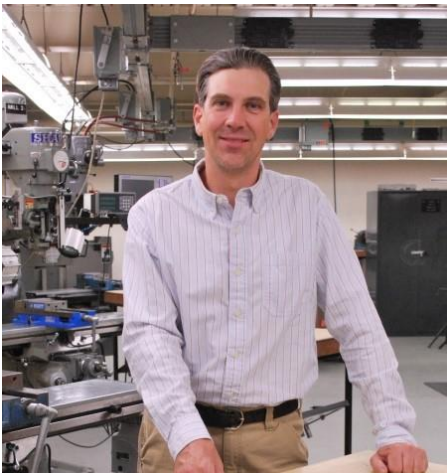
PEOPLE'S CHOICE

Shock Circuit for Virtual Fence System

Zachary DeLuca - Electrical Engineering
Abby Fellows - Biological Engineering
Jaycee Johnson - Biological Engineering
Sydney Schoth - Biological Engineering

2024

COLLEGE OF ENGINEERING OUTSTANDING FACULTY & STAFF



OUTSTANDING TECHNICAL STAFF AWARD

Brian Petty

Brian Petty started his career in manufacturing after a mechanical drafting class introduced him to machining, which set him on the path to earning a degree in Machine Tool Technology. After years of working primarily in aerospace and R&D, he joined the University of Idaho in 2017 as the Scientific Instrument Maker for the Department of Physics. In 2023 he became the manager of the Mechanical Engineering machine shop, where he teaches students the fundamentals of machining and helps them prototype and test their designs.



OUTSTANDING ADMINISTRATIVE STAFF AWARD

Kylie Sparks

Kylie Sparks has been with the College of Engineering for two years now, starting first as Administrative Coordinator for just Student Services, and eventually for the Office of Development as well. She greatly enjoys the variety of tasks encompassed by her position, which keeps things from growing stagnant. She enjoys interacting with our excellent faculty and staff, and especially with our students, whose drive and ingenuity continue to blow her away year after year. In her free time she enjoys

reading, knitting, and cuddling with her dog Molly. Moscow is her favorite place she's ever lived, and she hopes to stay here a good long while.



OUTSTANDING TEACHING AWARD

Nathan Schiele

Dr. Nathan Schiele, an Associate Professor in Chemical & Biological Engineering, has been a faculty member at UI since 2015. His research focuses on understanding tendon formation to improve therapies for debilitating tendon injuries and has been funded by the National Institutes of Health and National Science Foundation. He is committed to enhancing undergraduate education by providing research experiences in his lab. Additionally, he supports undergraduate research opportunities as the UI Campus Leader and Student Coordinator for the NIH Idaho IDeA Network of Biomedical Research Excellence (INBRE) Program as well as a Faculty

Affiliate in the UI Office of Undergraduate Research. Dr. Schiele is also the Faculty Advisory for the Biomedical Engineering Society student chapter, which advances knowledge of the state of art in biomedical engineering and promotes networking with alumni. Dr. Schiele teaches introductory and upper-level courses in biological engineering as well as ENGR 123: First Year Engineering.



DEAN LARRY & NICOLE STAUFFER EARLY CAREER FACULTY AWARD

Gianluca Blois

Gianluca Blois, is an assistant professor in the Mechanical Engineering Department at the University of Idaho in the area of experimental fluid dynamics. Blois completed his doctoral studies in Milan, at the Politecnico di Milano. He then moved to Urbana-Champaign at the University of Illinois where he was a member of the Laboratory for Turbulent and Complex Flows (LTCF). In 2015 Blois joined the Department of Aerospace and Mechanical Engineering faculty at the University of Notre Dame. Blois research explores the intersection of flow physics and environmental processes and focuses on turbulent and multiphase phenomena in a range of natural systems and engineering applications. His research portfolio is predominantly inspired by geological and biological systems with complex boundaries and interfaces.



MID-CAREER FACULTY AWARD

Emad Kassem

Dr. Emad Kassem is an Associate Professor in the Department of Civil and Environmental Engineering at the University of Idaho. His research focuses on construction materials characterization, analytical and computational modeling of infrastructure materials, and analysis and design of pavement systems.

He has served as principal investigator and co-principal investigator on 25 research projects at University of Idaho, with funding more than \$5.8 million, sponsored by various federal, state, and international transportation agencies. He supervised

more than 20 graduate students including five PhD students. He teaches several classes and enjoys teaching engineering statics.

Dr. Kassem has more than 120 technical publications, conference papers, and reports. He received the Texas A&M Transportation Institute/Trinity New Researcher Award in 2011, the Engineers Council Outstanding Engineering Achievement Merit Award in 2016, and the TRB AFD60 Best Poster Award in 2020.



MID-CAREER FACULTY AWARD

Amin Mirkouei

Dr. Mirkouei is an Associate Professor at University of Idaho (UI), Forbes sustainability contributor, and experienced Technologist. With over two decades of hands-on experience in engineering and science research, he has developed a deep knowledge of the principles, concepts, and methods that underpin successful project leadership. This is exemplified by his current role as a faculty member in several programs (e.g., Industrial Technology, Technology Management, Mechanical Engineering, Biological Engineering, Computer Science, and Environmental Science) at UI, where he has led diverse research teams to develop pioneering engineering solutions,

many of which have received local and international recognition, and reflecting the interdisciplinary nature of his funded projects.



OUTSTANDING FACULTY AWARD

Vivek Utgikar

Dr. Vivek Utgikar joined the University of Idaho in 2001 and is currently a Professor in the Department of Chemical and Biological Engineering. He has also served as the Associate Dean of Research for the College of Engineering and as the Interim Director of the Nuclear Engineering Program.

Professor Utgikar's research interests include energy systems, modeling of multiphase systems, and environmental remediation/resource recovery. His teaching portfolio includes a broad range of chemical and nuclear engineering courses including transport phenomena, kinetics, thermodynamics, and energy systems. He is the author of two

textbooks in chemical engineering: *Fundamental Concepts and Computations in Chemical Engineering* (2017), and *Chemical Processes in Renewable Energy Systems* (2021), both published by Pearson, Boston. He is a recipient of the Fulbright-Nehru Academic and Professional Excellence Fellowship for conducting research on the recovery of critical materials from e-waste at the Institute of Chemical Technology, Mumbai, India.