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Maine College of Engineering and Computing

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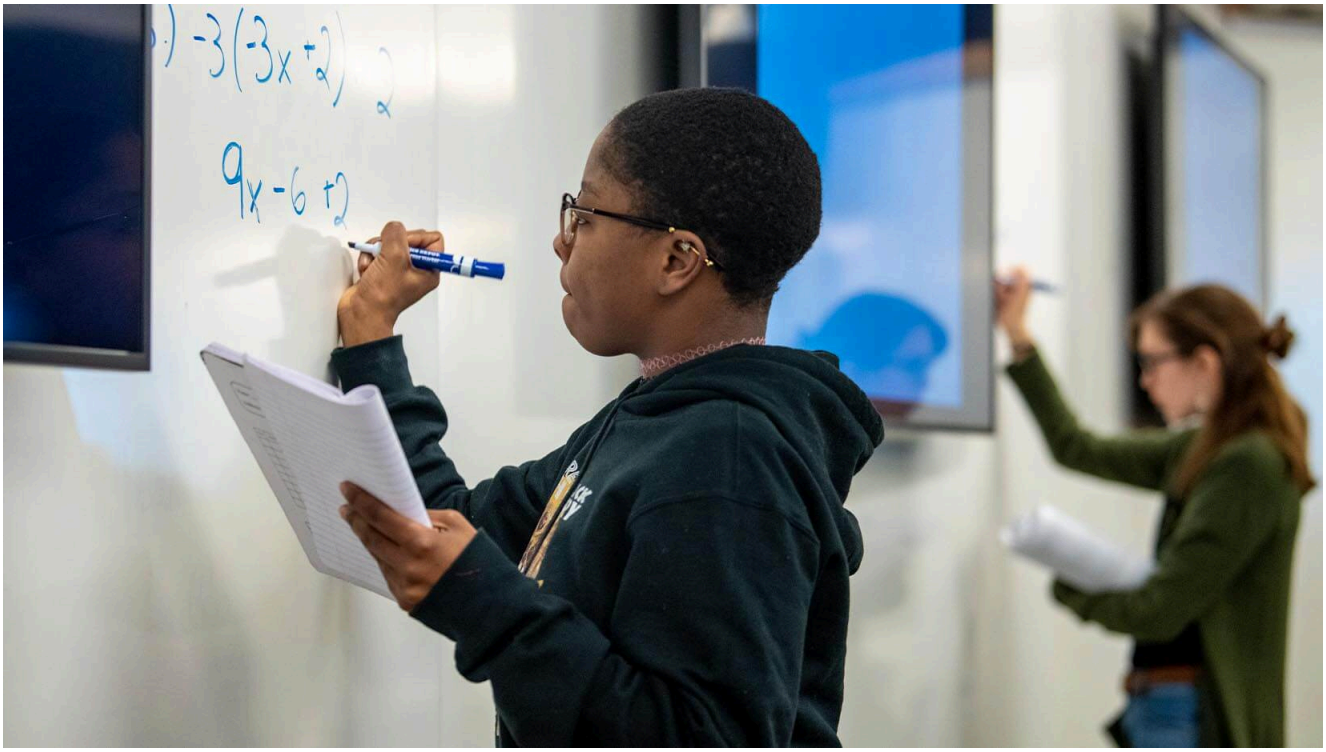

UMaine Foundation receives $15.5M for two new faculty chairs in mathematics and engineering disciplines

The University of Maine Foundation has received a partial distribution of $15.5 million from a UMaine alum to create two new senior faculty roles that will bolster engineering and mathematics instruction and research at their alma mater.

The estate gift from this donor, who chose to remain anonymous, is the largest single gift from an individual the UMaine Foundation has ever received. With it, UMaine will recruit two new faculty chairs: one within the Maine College of Engineering and Computing and the other in mathematics in the College of Liberal Arts and Sciences.

“This amount of support, invested in the two chair positions, will have a tremendous ripple effect through the faculty, department, college, and students as a permanent legacy,” says UMaine Foundation President/CEO Jeffery Mills. “This person cared deeply about the University of Maine, and we respect their desire to remain unnamed. We now must ensure that the donor’s wishes are carried out.”

Read Full Story

The **University of Southern Maine** is thrilled to launch a new Bachelor of Science program in **Industrial Engineering**. This program is designed to meet the evolving needs of various industries, particularly those in Maine. This degree program is a blend of foundational knowledge and practical skills, crafted to prepare students for immediate entry-level professional roles in diverse industrial arenas.

Graduates will be adept at employing cutting-edge software and analytical tools to untangle intricate problems in fields as varied as healthcare, manufacturing, business logistics, and tourism. The curriculum also instills an appreciation for the historical context of industrial engineering, emphasizing the pivotal role these professionals play in fortifying the nation's infrastructure.

Find out more here.

Dartmouth XR guru and New Media alumnus **John Bell** gave a guest presentation on 15 November on how generative AI is revolutionizing immersive media, from animation to games to augmented and virtual reality. The recording of this talk includes cutting-edge demos that reveal the technical possibilities and ethical risks of these transformed 3d applications.

Watch the webinar here.

Senior Biomedical Engineering Undergrad **Ainslie Allen** has won the 2023 J. Morris Weinberg Student Innovation Award for her work on using Maine-made large-scale diffraction gratings as low-cost surface contamination sensors.

At the Annual Conference of the New Hampshire Land Surveyors Association (NHLSA) in December, **Rich Vannozzi of Survey Engineering Technology**, received an Honorary Membership in recognition of 20 years of service providing educational opportunities to their members. Presenting the award was Past President of NHLSA, Doug Burnell. Vannozzi also had the opportunity to see one of his former students conclude their presidency of the NHLSA and a second former student ascend to the presidency.

Four **Construction Engineering Technology** students gave presentations on their individual Summer Contractor experiences at the 72nd Maine Transportation Conference "Smart Investments Strong Infrastructure Advancing Maine's Transportation Landscape" on December 7, 2023 in Augusta, Maine.

The students were judged individually by the attendees and were awarded cash prizes for their presentations. The Student session was moderated by Dean Dr. Giovanna Guidoboni from the Maine College of Engineering and Computing.

Picture: Left to Right Billy Embach, Lindsay Merrifeld (MDOT Engineer), Sidney Gamage, Dean Guidoboni, Cody Holman, Sam Bloniasz

An abstract co-authored with high school students and teacher was accepted for presentation at to the 2024 Annual Meeting of the Association for Research in Vision and Ophthalmology, which is the largest research conference in ophthalmology worldwide.

The abstract titled “Inspiring interest in eye research by bridging engineering and ophthalmology in high school”, was authored by **Michael Murphy, Giovanna Guidoboni, Giuseppe Aulisa, Logan Hart, Ethan Marquis, Lorena Bociu, Alon Harris**. The purpose of this project is to bridge engineering and ophthalmology research in a high school course that inspires discovery-driven learning and critical thinking via cutting-edge research applications.

Professor Roberto Lopez-Anido, member of the Fiber Composites and Polymers Standards committee of of the Structural Engineering Institute of the American Society of Civil Engineers (ASCE) was the lead author for a chapter of a new book: ASCE/SEI 74-23 Standard, Load and Resistance Factor Design (LRFD) for Pultruded Fiber Reinforced Polymer (FRP) Structures, ISBN: 9780784483480, ASCE Press, Reston, VA, 110 pp., 2023. The chapter authored by Prof. Lopez-Anido is titled: "Chapter 7. Design of Plates and Built-Up Members.”

Seven biomedical graduate and undergraduate students attended the AVS International Symposium and Exhibition in Portland, OR. Graduate students: Junie Fong, Liza White, Evan Leonard, Zach Applebee; Undergraduate students: Emma Kunesh (jr), Anna Folley (sr), Lindsey Pierce (sr). They all presented posters or gave talks and their work was very well received by the biological surface science community.

Computer Science capstone project teams are garnering praise. Representatives from ReMo had this to say about our students “We are grateful for our collaboration with Dr. Laura Gurney's Computer Science Capstone at the University of Maine (Orono). Tyler, Ayan, Nicholas, Michael, and Anthony are taking their love of books and programming skills to a new level to create something that will empower educators and students using ReMo.”

“The students in the capstone courses are immersed in the world of real software development alongside a professional client, ReMo. Through this unique opportunity, they not only cultivate professional connections, but also gain valuable experience in client/programmer communications. Furthermore, they get to engage in hands-on project development within the Software Development Life Cycle, all in collaboration to create an application with and for ReMo”. said Dr. Laura Gurney.

Designed for grades 4-12+, ReMo is a web-based application that provides readers with unparalleled insight and access to the books available to them. By streamlining the cumbersome

ENGINEERING EXPO
INSPIRING FUTURE ENGINEERS

The 2024 **Maine Engineers Week Exposition** will be held at the **University of Southern Maine**, Gorham campus, at the USM Field House, on **Saturday, March 2, 2024 from 9 am - 2 pm.**
The Expo features Maine's top engineering firms, engineering schools, educators, government agencies, industry, and engineering societies throughout the state. The Expo offers K-12 attendees first-hand experience to the many contributions that Maine Engineers make to our communities and way of life.

Learn more…

Quick Bytes

Caitlin Howell received the 2023 Early Career Researcher award from the Biointerfaces Divison of the AVS at their International Symposium and Exhibition in November.

Prabuddha Chakraborty and Electrical and Computer Engineering PhD student Tanzim Mahfuz, were part of the winning team (1st place) for the Cybersecurity Games & Conference (CSAW) Logic Locking Competition 2023.

UMaine will be hosting the **American Institute of Chemical Engineers (AIChE) Eckhardt Northeast Regional Student Conference** on April 19-20, 2024

Biomedical Engineering PhD student, **Junie Fong** won first place in the Flash Presentation and Poster award competition put on by the Biomaterial Interfaces Division of the AVS International Symposium.

Onur Apul of Civil and Environmental Engineering has written a report on "Per- and Polyfluoroalkyl Substances (PFAS) Free Laboratory Analyses Program for Public Water Suppliers and Private Wells" conducted in Massachusetts from MassDEP is published for public use where Apul has served as a project director.

Dr. Ali Abedi was part of a team at IEEE Computer Society that worked on future technology predictions report, which was published in Jan 2024. The panel has made 21 predictions, with each technology being graded for its potential for success in 2024, impact on humanity, predicted maturity, market adoption, and horizon to commercial adoption. Link to publication.

Senior CET Student **Jacob Nelson** placed second in the National AGC Allhands

23-24 Academic Year Maine Space Grant Consortium Research

Biomedical engineering department received a **$400K grant** from the

United States on the topic; How is the construction industry meeting the needs of the newest generation and what are some of the changes that could be considered as we move to the future? He will be recognized at the National AGC Conference in San Diego, CA March 19-22, 2024

Film Reactor for the Synthesis of Atomically Precise Graphene Nanoribbons," advised by **Tomas Marangoni**

through the STTR Phase I program. UMaine is a sub awardee. **Dr. Andre Khalil** (PI for UMaine, professor of biomedical engineering) is working with Dr. Kendra Batchelder (PI for WAVED Medical).

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