



Upcoming Events

“Improving Sustainability through Compressed Air and Boiler Improvements” Webinar

Presented by Dr. Joseph Carpenter  
Tuesday February 20th 2024, 2-3PM EST

Free to register:

<https://bit.ly/CSE3CompressedAirandBoilerWebinar>



ECU engineering graduate student Behzad Zeinolabedini on the job at LS Cable & System USA.

Undergraduate Spotlight,  
Ariel Lineberger



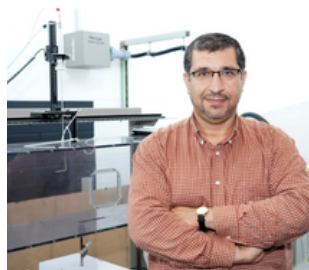
“I recently attended the Georgia Environmental Conference on Jekyll Island. This event was a great learning experience for me as I was able to step out of my comfort zone. Being selected as an undergraduate finalist for the Georgia Environmental Conference was both shocking and exciting seeing that I applied on such short notice. At the conference, I was able to come away with new connections in the water resources industry and even some job offers!”

CSE3 Faculty Dr. Carol Massarra



Dr. Carol Massarra is part of a team of ECU professors working on a \$226,088 grant from the Civil-Military Innovation Institute. The proposal offers a way for the Army to improve on building maintenance schedules. Though the project is looking at one specific building at Fort Liberty in Fayetteville, the project could have impacts for all Army building maintenance. During the project, construction management will be responsible for assessing buildings, checking the HVAC systems and collecting maintenance data. While computer science will be responsible for developing the model that will predict future maintenance, and technology systems and will be responsible for developing a LoRa demonstration.

CSE3 Selected by the Biden-Harris Administration to Receive \$563,932 Pollution Prevention Grant to Advance Environmental Justice



Recently, the Biden-Harris Administration announced that East Carolina University was selected to receive a \$563,932 pollution prevention grant through the Environmental Protection Agency (EPA). This funding is intended to develop and adopt practices that prevent pollution at the source in local communities. CSE3 provides technical assistance to suitable manufacturing facilities in disadvantaged communities to reduce the use and release of hazardous substances and increase water and energy efficiency. Our outreach programs include on-site general and targeted technical assessments, industry roundtable discussions, training courses, and pollution prevention promotion. This generous award will help CSE3 achieve our goal of improving human health and the environment in disadvantaged communities by reducing the release of pollutants and contaminants in North Carolina communities characterized by low-income and minority populations.

Clean Carolinas



Led by UNC Charlotte’s Dr. Michael Mazzola, and ECU’s Dr. Tarek Abdel-Salam, the Clean Carolinas project is designed to support the economy and growth of the Carolinas through clean energy technology, including innovations in offshore wind, solar, clean hydrogen and marine energy, meeting the challenges of achieving a goal of a net-carbon-neutral electric grid by the year 2050. The effects of this project will have an overall benefit to residents of both North and South Carolina.

Happy Holidays!



On December 5th CSE3 staff, students, and faculty gathered for our annual award ceremony and holiday potluck. Senior students Alex Ferro, Ariel Lineberger, and Daniel Franklin were recognized for their hard work and unique talents. It was wonderful celebrating with everyone! From all of us at CSE3, we wish you and yours a happy holiday!

Graduate Research, Ben Cortez



“I am researching experimental and numerical optimization of point-absorber wave energy converters. To conduct my research, I am using a wave tank to test buoy geometries which I will then simulate those experiments on a computer. I was inspired to study this topic during my masters in mechanical engineering program, as I find renewable energy extremely interesting. This project allowed me to contribute to valuable research.”

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