

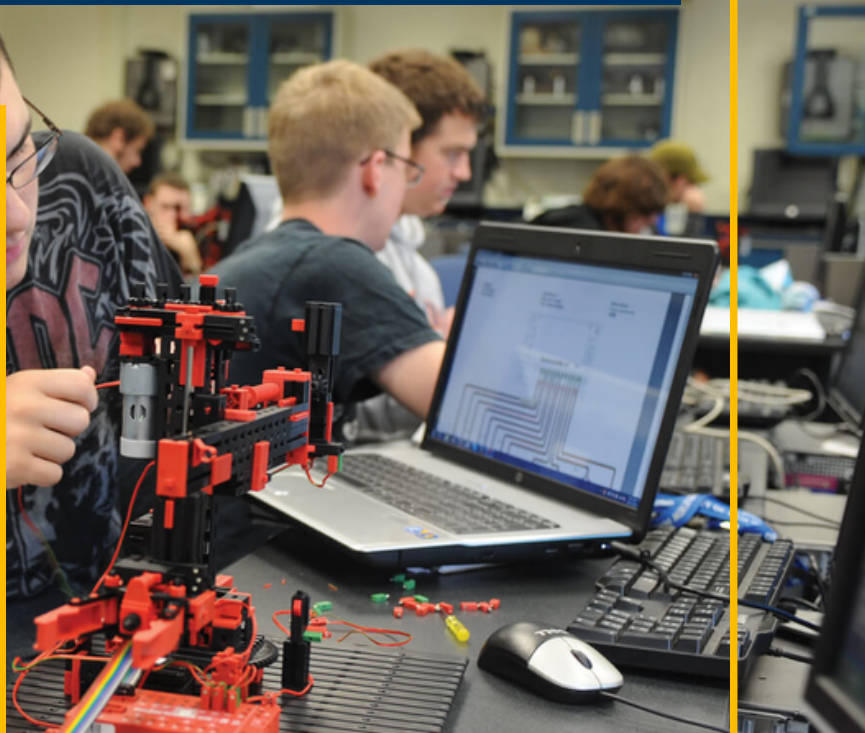
Dec 2022

# 2022 NEWSLETTER



## MECHANICAL AND INDUSTRIAL ENGINEERING DEPARTMENT

As the year comes to a close, we are proud to highlight the numerous achievements of our students and faculty in the Mechanical and Industrial Engineering Department at the university of New Haven. Despite the challenges of the past year, our community has continued to excel and make a positive impact on the world. We are grateful for the hard work and dedication of all members of our community and look forward to even more success in the coming year.



## NEWSLETTER HIGHLIGHTS

- Note from the Interim Chair
- Publications
- Conference Presentations
- Research Talks
- Awards and grants
- About MIE programs

## Note from the Interim Chair:



When I look back to the earlier days and reflect on why I wanted to become a professor, I end up coming up with the same answer which is to train students, so they become well-meaning and contributing members of society.

Eight years after joining the faculty body in this department, receiving great mentorship from the then leadership, and learning the ropes, I am pleased to find myself back to help the department embrace the new opportunities which lie ahead and to support students' training with the same enthusiasm that I had on day one.

I am proud of our high achieving student body who receive training in the undergraduate and graduate mechanical engineering programs or in the industrial/systems or engineering operations management graduate programs.

This inaugural newsletter aims to, first and foremost, celebrate the achievements of these students who continue to push the frontiers of achievement in the department. Secondly, it celebrates the achievement of faculty and acknowledges their time investments in training our students. Having faculty who deeply care about applying best teaching and research practices towards training students and about their well-being like ours means that our students' success starts here. To ensure this, our faculty bring their highly-sought-after expertise to their classrooms every day and are intentional about providing an experiential education for our students.

With our highly supportive and experienced technical and administrative staff, the right amount technical and logistical knowhow exists in our learning spaces which are equipped with the state of the art in hard and software and in our front offices.

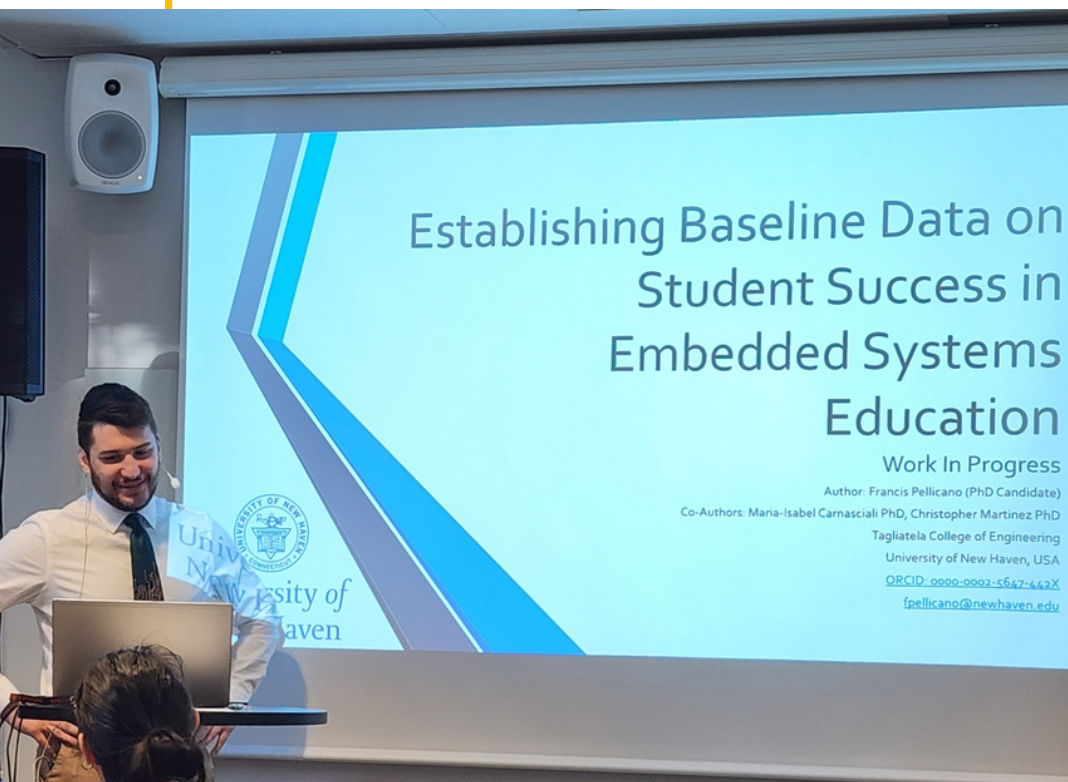
The future of the department, in the hands of excellent faculty, supportive technical & administrative staff, high achieving students, and with adequate institutional support, is truly bright.

Congratulations on all your achievements!

Kagya Amoako Ph.D.

# PUBLICATIONS

- S. Ren, CQ. Li, "Robustness of transfer learning to image degradation", Expert Systems with Applications Journal.
- S. Ren, CQ. Li, X. Mei, "Feature Extractor Enhancement by Structural Modifications, 17th International Conference on Machine Learning and Data Mining MLDM'2022, New York, USA.
- M. Soltanolkottabi, H.A. Khorshidi, M.J. IJzerman, "Modeling of Whole Genomic Sequencing Implementation using System Dynamics and Game Theory", Institute of Industrial and Systems Engineering (IISE) Annual Conference, 2022, Seattle, USA.
- F. G. Pellicano, M. -I. Carnasciali, C. Martinez, "Establishing Baseline Data on Student Success in Embedded Systems Education," 2022 IEEE Frontiers in Education Conference (FIE), 2022, pp. 1-4.
- M. -I. Carnasciali, A. Hira, J. Tonn, "Understanding Student Experience and Motivation in a New Human-Centered Engineering Program – Insights from the First Cohort," 2022 IEEE Frontiers in Education Conference (FIE), 2022, pp. 1-5.



"A highlight of this fall semester was the opportunity to attend and present at the IEEE Frontiers in Education Conference in Uppsala, Sweden. It was a fantastic opportunity to network and listen to all the innovative work taking place in engineering education across the globe."

Dr. Maria-Isabel Carnasciali

# CONFERENCE PRESENTATIONS

- S. Ren, CQ. Li, X. Mei, "Feature Extractor Enhancement by Structural Modifications, 17th International Conference on Machine Learning and Data Mining MLDM'2022, New York, USA.
- M. Soltanolkottabi, H.A. Khorshidi, M.J. IJzerman, "Modeling of Whole Genomic Sequencing Implementation using System Dynamics and Game Theory", Institute of Industrial and Systems Engineering (IISE) Annual Conference, 2022, Seattle, USA.
- M. Soltanolkottabi, V. Behzadan, "Reinforcement Learning for Optimization of Epidemic Containment Policies in Game Theoretic Simulations", Institute of Industrial and Systems Engineering (IISE) Annual Conference, 2022, Seattle, USA.
- F. G. Pellicano, M. -I. Carnasciali, C. Martinez, "Establishing Baseline Data on Student Success in Embedded Systems Education," 2022 IEEE Frontiers in Education Conference (FIE), 2022, pp. 1-4.
- M. -I. Carnasciali, A. Hira, J. Tonn, "Understanding Student Experience and Motivation in a New Human-Centered Engineering Program – Insights from the First Cohort," 2022 IEEE Frontiers in Education Conference (FIE), 2022, pp. 1-5.
- M. -I. Carnasciali, T. Hesser, J. Brotman, Ch. Bockstael, "", 2022 Connecticut Architecture Conference + Expo.



## RESEARCH TALKS



- Dr. Marzieh Soltanolkottabi served as a guest speaker at ISPOR Student Symposium 2022. She delivered a presentation on Machine Learning Methods in Health Economics and Outcomes Research (HEOR)
- Dr. Marzieh Soltanolkottabi presented her research work titled "Modeling and Optimization of Epidemic Containment Policies" at the Center for Health Policy at the University of Melbourne

# AWARDS AND GRANTS

Dr. Cheryl Li received an award in an amount of \$32,000 sponsored by Meridian International Co. Ltd. on a project titled "Chicken Coop and Accessories Product Development"



Dr. Tom Filburn submitted a US NRC (nuclear reg commission) grad fellowship proposal (no decision yet) and supported an undergrad student who submitted a research and travel grant to the CT NASA space Grant Consortium (she was awarded the travel grant).

# ABOUT OUR PROGRAMS

## MECHANICAL ENGINEERING



The tools and machines that mechanical engineers have designed throughout history have lightened our loads, improved our quality of life, and taken us from the far reaches of outer space to the inner workings of minuscule nano devices. In the University of New Haven's Mechanical Engineering programs (ABET-accredited B.S. and MS) you will join that long line of pioneers, using your skills to design, analyze, improve, and test the products and systems that are essential to everyday life -- and to create those that don't yet exist.

Through our program, you'll build a multidisciplinary foundation in mechanical, chemical, civil, and electrical engineering and develop skills in physics, chemistry, and mathematics as well.

## INDUSTRIAL ENGINEERING ENGINEERING & OPERATIONS MANAGEMENT

As the only master's programs in industrial engineering and engineering & operations management available at an accredited institution in the state of Connecticut, this unique experience prepares students for future advancement in systems optimization, quality assurance, manufacturing, engineering management, procurement, the efficient use of both human and technological resources, as well for management positions in operations, supply chain, and technology.



**Read more about our programs:**

[Industrial Engineering](#)

[Engineering & Operations Management](#)

[Mechanical Engineering \(BS\)](#)

[Mechanical Engineering \(MS\)](#)

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# THANKS TO OUR RECENT DONOR

The MIE Dept. is thankful for its recent donor, Mr. Patrick G O'Brien, who graciously gifted us a new Hass Minimill CNC Vertical Machining equipment.

Thank you, Mr. O'BRIEN, for your most generous gift.

Mr. Patrick G O'Brien class of 1966 is the President and CEO of MCM Engineering, Inc. (845 Hinckley Road Burlingame, CA 94010 (650) 259-9100).

For 25 years, MCM Engineering has provided airports, airlines and aircraft manufacturers with to quality 400Hz Ground power systems as well as a variety of parts and repair services.

