



Industrial and Systems Engineering  
Newsletter SPRING 2025

# OPTIMUM

ENGINEERED FOR  
**WHAT'S NEXT.**



Cullen College of Engineering  
UNIVERSITY OF HOUSTON

## DEPARTMENT HIGHLIGHTS

# INDUSTRIAL ENGINEERING NOW INDUSTRIAL & SYSTEMS ENGINEERING AT CULLEN

To reflect the expanded nature of the programs offered at the Cullen College of Engineering, the Industrial Engineering Department is now the Industrial & Systems Engineering Department.

The name change was approved by the Texas Higher Education Coordinating Board on February 3, 2025, effective immediately. The new name reflects the increased scope of industrial engineering that is being offered by Cullen in a world that increasingly relies on the engineering work of complex, integrated systems.

**Gino J. Lim**, Professor & R. Larry and Gerlene (Gerri) R. Snider Endowed Chair, cited the wide need for skilled professionals and increased visibility as reasons for the name change and the emphasis on Systems Engineering.

"The department introduced the B.S. degree in Systems Engineering to address the urgent demand for well-trained system engineers in the Greater Houston Area," he said. "This program also aims to enhance the expertise of a significant number of local industrial professionals, particularly in Oil & Gas and Healthcare, by equipping them

with the confidence and skills required to lead complex engineering projects successfully."

Systems Engineering has been offered by the Industrial Engineering Department since 2020, as part of the College's development of the Katy campus. Lecturers **Neil Diaz Martinez** and **Nirathi Keerthi Govindu** are part of the program, which has produced notable student successes since its establishment, like **Jordyn Sibert**, a member of the 2023 cohort for the Department of Defense's SMART scholarship program. Sibert is also the 2024-25 Outstanding Senior for the Systems Engineering Department.

"Since its inception, enrollment in the Systems Engineering track has grown rapidly, with the first cohort of graduates set to enter the industry this summer," Lim said. "This track will further strengthen the ISE department by fostering innovative solutions and contributing to the development of a highly skilled workforce for our nation." ⚙️

# INDUSTRIAL & SYSTEMS ENGINEERING

# ISE HONORS ALUMNI, FACULTY, STAFF, STUDENTS AT 2025 AWARDS BANQUET

Friends, family and peers gathered on April 10 to celebrate honorees at the 2025 Industrial and Systems Engineering Awards Banquet, held in the O'Quinn Great Hall at the University of Houston Athletics/Alumni Center.

The following awards were given out at the banquet:

- **ISE Chair's Leadership Award:** Abdulrahman Aljahmi ('24, BSIE), Process Improvement Engineer for Atlas Copco
- **ISE Outstanding Alumni Award:** Arun Adat ('05 M.S.), Vice President of Global Operations for HPE
- **ISE Academy of Distinguished Alumni Award:** Eric Ayanegui ('95 BSIE), Senior Director of Operations for CINTAS
- **Lifetime Achievement Award:** Nancy J. Currie-Gregg
- **ISE Outstanding Teaching Assistant Award:** Wissam Al Ali, Ph.D. student
- **ISE Outstanding Staff Award:** Sharon Hall
- **ISE Outstanding Instructor Award:** Yaping Wang
- **ISE Agrawal Endowed Scholarship Graduate Students:** Venkat Chary Guntoju, Nidhin Mammen, Pranav Adithya Narayanan, Bhaskar Pavan Jampana and Gowtham Seerapu
- **ISE Agrawal Endowed Scholarship Undergraduate Students:** Leah Jobby and Alexia Robert
- **Agrawal Association of America Scholarships:** Tugce Uslu Aktas, Venkata Somadatta Gandhavalla and Kaituo Zhang
- **Brij & Sunita Agrawal Scholarships:** Sampa Halder, Tong Li and Zirui Tong
- **Hall IE Endowed Scholarship:** Parsa Nasirisefat
- **IE Various Donor Scholarship:** Kishan Sapariya and Youssef Alchall
- **L. Xavier & Maria Cano Leadership Scholarship:** Reagan Kimberly
- **PVF Roundtable Endowed Scholarships:** Sai Karthik Dandamudi, Venkataswamy Goda, Praneeth Lingala, Fahama Sabhi Mohammad, Fariha Torsha, Fiorella Compos Perez and Cherrene Framo
- **PVF Roundtable Scholarships:** Muhammad Ashraf, Farzane Ezzati, Daksh Patel, Chuyue Wang, Jun Zhou, Yihan Zhou, Chris Aziz, Maria Barrientos Alvarado, Elijah Lozano and Jose Tovar
- **Sam Scharff IE Scholarships:** Sama Abdo and Stella Alexandre Garcia
- **Shoaleh Shirvani & Asghar Nosrati Endowed Scholarship:** Farzane Ezzati



### AGRAWALS INSTRUMENTAL IN BRINGING 2 DOCTOR OF NURSING PROGRAMS TO INDIA UNIVERSITIES

With support from the University of Houston's Andy & Barbara Gessner College of Nursing, two universities in India — MGM Institute of Health Sciences in Mumbai and Krishna Institute of Medical Sciences — have introduced the Doctor of Nursing Practice degree, expanding advanced nursing education in the country. It is the first time any university in India has offered the degree.

The idea to launch the degree program in India came across the globe from UH Board of Regents member **Durga D. Agrawal**, president and CEO of Piping Technology & Products, Inc. In addition to bringing the DNP program to UH, Agrawal and his wife Sushila had the opportunity, in February 2017, to meet with India's Prime Minister Narendra Modi in his office in Delhi and convinced him of its ability to improve healthcare worldwide.

"We discussed ways the DNP program, could assist in addressing India's healthcare needs, particularly in rural areas," Agrawal said. "I highlighted how bringing a program like the DNP from Texas could help upskill nurses in India, providing them with the clinical expertise required to address the health challenges faced in underserved regions."

The Agrawals are long-time supporter of the Cullen College of Engineering, and a building on campus bears their name because of their multiple generous gifts. Durga earned his master's degree and Ph.D. in Industrial Engineering from UH. ⚙️



*Sushila Agrawal*  
*Durga D. Agrawal, UH System Board of Regents*  
*Narendra Modi, Prime Minister of India*

## ZAKHARI'S IE DEGREE START OF LONG PURSUIT OF KNOWLEDGE

**Nivine Zakhari** has used her unique blend of skills and degree in multiple disciplines to thrive at Microsoft for the past 14 years, but that journey started with her studying Industrial Engineering at the Cullen College of Engineering.

While Zakhari grew up in Florida, as a National Merit Scholar she had several options out of high school. She chose UH thanks to a competitive aid package, and the desire to experience something new.

"UH did a phenomenal job recruiting me into the Honors College with a full scholarship," she said. "I had never visited Houston before, but the appeal of being in the fourth largest city at the time, and experiencing all that Texas has to offer — It was hard to resist the lure for something different after growing up in Florida."

She added, "The NASA connection was also motivating, because growing up relatively closely to Kennedy Space Center and then having the opportunity to learn near Johnson Space Center, I mean who doesn't imagine what it's like to be

an astronaut or part of the space program at some point?"

Zakhari was the youngest of three children, and she felt that desire to do something different from her siblings who stayed in Florida. Her father was an associate professor at the University of Florida College of Dentistry as well.

"My father was the OG Learn-It-All in our family. He loved to learn new things and if he wasn't learning, he enjoyed teaching others, whether formally as a professor and through professional continuing education programs, or informally in family and community gatherings."

Partially because of family influence, Zakhari started as a pre-med major, but the intellectual challenges and technology of engineering attracted Zakhari. She earned her B.S. and Master's degree at UH. ⚙️

*Nivine Zakhari*

*Graduate of the Industrial Engineering program*



## ISE STUDENT WAHL DETAILS CRAWFISH TO INTERNSHIP PATH

For **Ian Wahl**, a sophomore studying systems engineering at the Cullen College of Engineering, few events are more relaxing than a crawfish boil on a spring afternoon.

“The event brings out the best in people, setting up the best possible conditions for making genuine connections,” he said.

Some of his professional success is now due to how those connections can so easily flourish, as Wahl used the relaxed atmosphere of the 2024 UH Energy Industry Crawfish Boil to land his first internship. While serving as the incoming fundraising lead for the UH chapter of Engineers Without Borders (EWB), he made connected with professionals from Chart Industries.

“For most of the day, the other members held down our table — it was quite windy — and represented us to students and wandering professionals, while I made my rounds speaking with as many professionals at their tables as possible,” he said.

“One tent I stopped by was Chart’s, where I spoke with a rotational engineer, Harold, for 10 to 20 minutes before two other members joined me. Then, I started a conversation with Hannah, who’s in HR for Chart.”

These initial contacts led Wahl to following up after the event, after encouragement from his peers.

“A few days later, **Roy Castillo**, the rising president of the Institute of Industrial and Systems Engineers UH chapter, helped me write an email to Harold, following up on the internship opportunities and joint events we had discussed,” Wahl said. “Harold put in a good word and passed my resume to Hannah, who gave me an interview before passing me to a second technical interview, and then my first internship.”

When looking at his college options, Wahl said UH offered a rounded education that aligned with his interests while still being close enough to his home in Austin. ⚙️

**Ian Wahl**

*Sophomore, Systems Engineering*



# CULLEN NAMES OUTSTANDING STUDENTS FOR 2024–25 ACADEMIC YEAR

The Cullen College of Engineering is proud to announce that the following students have been named Outstanding Juniors and Seniors for their respective departments for the 2024–25 academic year.

Students are nominated by professors and the faculty chair for their department, based on a combination of GPA, courseload and extracurricular activities. In addition, an Outstanding Junior and Senior for the whole college is picked. This year, those students were junior Jonathan Gaucin and senior Parsa Tari.

The outstanding students by department are:

### **Biomedical Engineering:**

- Que Huong Ngoc Nguyen (junior)
- Swetha Sarvanan (senior)

### **Chemical and Biomolecular Engineering:**

- Mikas Dunn (junior)
- Dana Khalil (senior)

### **Civil and Environmental Engineering:**

- Nick Di Giovanni (junior)
- Chetan Gadapa (senior)

### **Computer Engineering:**

- Delfino Tzul (junior)
- Adriana Lopez Cajigas (senior)

### **Electrical Engineering:**

- Jonathan Gaucin (junior)
- Joshua Ixcolin (senior)

### **Industrial Engineering:**

- Trinh Nguyen (junior)
- Mona Almufti (senior)

### **Mechanical and Aerospace Engineering:**

- Urvi Bhatia (junior)
- Parsa Tari (senior)

### **Petroleum Engineering:**

- Christina Castillo (junior)
- Richard Montes (senior)

### **Systems Engineering:**

- Alexia Robert (junior)
- Jordyn Sibert (senior)



## 9 CULLEN STUDENTS HONORED AT ASIE HOLIDAY DINNER

Eleven different University of Houston students were honored with scholarships at the annual American Society of Indian Engineers and Architects holiday dinner, including nine from the Cullen College of Engineering.

ASIE is a Houston-based non-profit with the specific objective of supporting engineers, architects, engineering technicians, and related professionals and students, in their fields. The organization celebrated its 30th year in 2024.

This year's scholarship recipients from Cullen and their fields of study are:

- **Hariharan Annadurai**, Ph.D. in Chemical and Biomolecular Engineering
- **Vraj P. Chauhan**, Ph.D. in Chemical and Biomolecular Engineering
- **Bhanu Rama Ravi Teja Gonugunta**, Masters in Engineering Data Science
- **Venkat Chary Guntoju**, Master's in Industrial & Systems Engineering
- **Chirag Goel**, Ph.D. in Material Science and Engineering
- **Sreyashi Ghosh**, Ph.D. in Chemical and Biomolecular Engineering (Chad Patel Scholarship)
- **Deepank Singh**, Ph.D. in Civil Engineering (Swarajyam & Rangayya Gunda Memorial Scholarship)
- **Srihitha Varagam Reddy**, Masters in Construction Management (Tanwani Family Scholarship)
- **Sree Chakra Kulkarni**, Masters in Construction Management (ASIE Volunteer Appreciation Scholarship)

Other UH scholarship recipients are:

- **Neha Kulkarni**, Interior Architecture (MS Baroda scholarship)
- **Prabhakaran Elangovan**, Master of Architecture (Wadhwa Family Scholarship)



# CULLEN

## The University of Houston Cullen College of Engineering

The University of Houston Cullen College of Engineering addresses key challenges in energy, healthcare, infrastructure, and the environment by conducting cutting-edge research and graduating hundreds of world class engineers each year. With research expenditures topping \$40 million and increasing each year, we continue to follow our tradition of excellence in spearheading research that has a real, direct impact in the Houston region and beyond.

ENGINEERED FOR  
**WHAT'S NEXT.**





**Cullen College of Engineering**

UNIVERSITY OF **HOUSTON**

UH Cullen College of Engineering  
Department of Industrial Engineering  
Engineering Building 2, Room E 206  
4222 Martin Luther King Boulevard  
Houston TX 77204-4008



@UHEngineering

# OPTIMUM

