Northwestern | **McCORMICK** SCHOOL OF **ENGINEERING**

Industrial Engineering and Management Sciences

FROM THE CHAIR / Spring 2025

Dear colleagues and friends,

I am proud to share some of our department's recent accomplishments. As you'll read below, IEMS faculty and students have sustained their excellence and are ending the academic year strong.

As you've likely heard, a notable portion of Northwestern's federally funded research is subject to stop work orders. Our department has felt the effects of these decisions directly. Nevertheless, we remain steadfast in our mission to advance data science for decision-making. Research is central to that charge, as is educating the next generation of leaders in the field who will create future decision-support tools to benefit society. As a department, we've united to define a clear path forward, one that strengthens our impact while remaining true to our core values.

Though these times have presented challenges, we've also experienced many successes.

I am excited to welcome new faculty members **Naichen Shi** and **Zikai Xiong**, who bring expertise in optimization, data analytics, healthcare, and smart manufacturing. Professor **Karen Smilowitz** has been appointed associate provost for undergraduate education at Northwestern, and Assistant Professor **Julia Gaudio** received the prestigious NSF CAREER Award for her research in networks. Our department continues to gain national recognition, with our industrial engineering PhD program rising to No. 3 in the most recent *US News*

and World Report graduate school rankings.

Thank you all for your continued dedication and support. As we move into the summer, let's build on our momentum, stay focused on our shared goals, and navigate the shifting landscape together with creativity and purpose.

Simge Küçükyavuz

David A. and Karen Richards Sachs
Professor and Chair
Industrial Engineering and Management Sciences
McCormick School of Engineering

Industrial Engineering Welcomes Two Assistant Professors

Naichen Shi and **Zikai Xiong** will bring expertise in optimization, data analytics, healthcare, and smart manufacturing.

Smilowitz Named Associate Provost for Undergraduate Education

An industrial engineering faculty member for more than two decades, Professor **Karen Smilowitz** will lead Northwestern's Office of Undergraduate Education, where she will work to ensure "all students have what they need to thrive."

Gaudio Receives Prestigious NSF CAREER Award

The award will support Assistant Professor **Julia Gaudio's** research into inference and reconstruction problems on networks.

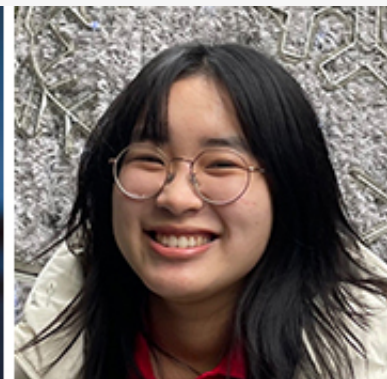## Building Practical Knowledge of the Data Science Lifecycle

Assistant professor of instruction **Moses Chan** is one of the new leaders of the minor in machine learning and data science, a joint program offered by the

Department of Industrial Engineering and Management Sciences and the Department of Computer Science.

Engineering Students Pitch Ideas to Men's Soccer on How to Use Data

During a machine learning and data science hackathon, teams provided coach Russell Payne new insights driven by AI.

IEMS Student Wins First Place in Video Contest to Promote ISE Professions

Pantira Ketkaew's work was cited for its impact to further the introduction of the industrial and systems engineering profession. **VIDEO**

Chicago Students Explore Industrial Engineering During Campus Visit

Chicago Math and Science Academy students discovered career possibilities and campus life during a recent trip to Evanston.

IEMS Climbs up *US News* Rankings

The Department of Industrial Engineering and Management Sciences at Northwestern Engineering continues gaining outside recognition. This year's *US News and World Report* **rankings** listed Northwestern Industrial Engineering as the No. 3 PhD program among other industrial engineering programs, rising from No. 4 a year ago.

Boyd Delivers Wasserstrom Lecture

In April, Stanford's **Stephen Boyd** delivered the Wasserstrom Distinguished Lecture. During the talk, Boyd outlined the growing importance of convex optimization in a broad range of applications, including data analysis, machine learning, statistics, resource allocation, engineering design, network optimization, finance, and signal processing.

The lecture offered an overview of the fundamental mathematics, core algorithms, and widely used software frameworks that support convex optimization. The professor also presented real-world examples to illustrate how these tools had been applied effectively in practice.

Alumni Return to Pitch Prospective Students

Viji Krishnamurthy (PhD '05), vice president of generative AI solutions at Oracle, and **Kim Yu** (PhD '23), an assistant professor at the University of Montreal, returned to campus to speak to prospective students about the benefits of earning a PhD in industrial engineering. They also held a panel for current PhD students about the best ways to succeed in the program and how to build a career after graduation.

Department News

Professor **Noshir Contractor** was selected as a 2025-26 fellow of the Center for Advanced Study in the Behavioral Sciences at Stanford University.

Professor **Brian Uzzi** was one of nine Northwestern University faculty members **elected to the American Academy of Arts and Sciences**, one of the nation's oldest and most prestigious honorary societies.

Professor **Stefan Wild** became a Society for Industrial and Applied Mathematics Fellow, and received the Presidential Early Career Award for Scientists and Engineers (PECASE).

PhD student **Akul Bansal** received an Honorable Mention in the 2024 Mixed Integer Programming International Workshop Poster Competition for the poster "A Computational Study on Cutting-Plane Algorithms for Stochastic Programs."

PhD student **Charlie Guan** received the Dr. John N. Nicholson Fellowship for the 2025-2026 academic year.

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