

SEFI EARLY CAREER RESEARCHERS' CLUB

October 2025 to June 2026

Supporting and connecting early-career researchers in engineering education

Organizers:

Dr. Xiaoqi Feng

Dr. Diana Martin

Table of Contents

Initiative description.....	3
Timetable.....	4
Mentoring groups	5
Organisers' bio	6
Mentors' bio.....	8
Participants' bio & Fun fact	16

Initiative description

The SEFI Early Career Researchers' Club is a year-long initiative designed to support and connect early-career researchers in the field of engineering education research (EER). Whether you're just starting your PhD or have recently completed it, this programme offers a space to explore key topics in EER, exchange ideas, and grow as a researcher.

This initiative is co-organised and facilitated by Dr. Xiaoqi Feng (TU Delft) and Dr. Diana Martin (UCL). For the 2025–2026 cohort, the initiative includes 9 monthly 1h online sessions, each focusing on a specific theme, such as publishing, funding, or career development. The sessions will be led by 1 to 3 invited guest speakers who are experienced scholars in EER to share their insights and experiences. Active participation and dialogue are central to every session.

The monthly online sessions will be complemented by 3 yearly meetings with the triad of 3 mentees and 1 mentor.

This year's cohort is limited to 24 participants to ensure meaningful interaction and a strong sense of community. Participants who attend at least 5 out of the 9 sessions and prepare a brief presentation on a relevant EER topic within their mentoring meeting will be eligible to receive a certificate. If you would like this learning experience to be recognized at your institution as ECTS or study credits, please contact Xiaoqi and Diana to discuss the possibilities.

We're excited to embark on this journey with you. Let's learn, share, and grow together.

Timetable

Monthly sessions:

#	Month	Date & Time	Topic	Guests
1	October	21st Oct 14:00-15:00 CET	Discussion: <i>Professional trajectories and career planning</i>	Inês Direito (University of Aveiro) Justin Hess (University of Purdue) Xiaoqi Feng (TU Delft)
2	November	14th Nov 16:00-17:00 CET	Discussion: <i>Trends in EER</i>	Greet Langie (KU Leuven) Corrinne Shaw (Cape Town) Diana Martin (UCL)
3	December	9th Dec, 13:00-14:00 CET	Using and developing a theoretical lens	Karin Wolff (Stellenbosch University)
4	January	TBC	Ethical considerations for research, and leveraging the use of AI	Mohammad Hosseini (Northwestern University)
5	February	TBC	Teaching in early career	Roland Tormey (EPFL), Matheus de Andrade (UCL)
6	March	TBC	Communicating your research to a broad audience	TBC
7	April	TBC	Mentorship and supervisory relations	TBC
8	May	TBC	The EER grant landscape	Shannon Chance (TU Dublin)
9	June	TBC	From dissertation to journal publication: tips and tricks	Kristina Edström (KTH)

Mentoring groups

Mentors	Early Career Researchers		
<i>Muhsin Menekse</i>	Michael O'Connell	Animesh Paul	Hanna Aarnio
<i>Lelanie Smith</i>	Rachel Higbee	Rubaina Khan	Amdad Awsaf
<i>Diana Bairaktarova</i>	Vanessa Tran	Shameela Arbi	Merryn McCrea
<i>Aditya Johri</i>	Luke Dokter	Matthew Cairns	Emily Buten
<i>Euan Lindsey</i>	Gibin Raju	Xiaolu Rui	Rozali Badaoui
<i>Susan Lord</i>	Margaret Webb	Baatseba Ramushu	Shukufe Rahman
<i>Greet Langie</i>	Irene Magara	Peyiun Xu	Umawathy Techanamurthy
<i>Tom Børsen</i>	Mary Nolan	Sam Snyder	Kaitlyn Thomas

Organisers' bio

Xiaoqi Feng (TU Delft)

Xiaoqi Feng is a Postdoctoral Researcher at Delft University of Technology (TU Delft). She has an academic background in education. Prior to her postdoc, she completed her D.Sc. in Technology from Aalto University in Finland, where she researched on the transformative potential of interdisciplinary pedagogies in engineering education, specifically, the challenges students face when working with others and the kinds of learning outcomes that emerge from those transformative experiences. Besides research, she's also very active in teaching and development and worked at Aalto as an educational specialist, supporting university strategy integration with curriculum development.



Fun fact: Harbin, China, is famous for its chilly but beautiful winters with astonishing amounts of snow and ice. In 2023, during the annual International Ice and Snow Festival, it was awarded a Guinness World Record for the world's largest ice and snow park: it took more than 10,000 people and almost 1 month to finish all ice and snow sculptures and facilities.

Diana Martin (University College London)

Diana is a Senior Researcher at UCL Centre for Engineering Education. Diana is co-chair of the SEFI Ethics SIG and Europe board representative in the Research in Engineering Education Network. Her research focuses on the integration of ethics, sustainability, and societal responsibility in engineering education. Diana is a co-editor of the Routledge International Handbook of Engineering Ethics Education (2025), as well as Associate Editor of the Routledge Handbook of Engineering Education (2023), and the journals *Science and Engineering Ethics* and *The European Journal of Engineering Education*.

Fun fact: The word "vampire" in most languages comes from the Serbian "vampir," but Romanians actually have their own unique undead creature called "moroi," who feed of the energy of living people.



Mentors' bio

Aditya Johri (George Mason University)

Aditya Johri is Professor of Information Sciences & Technology and Dr. Lawrence Cranberg Endowed Research Fellow in the College of Engineering & Computing at George Mason University, USA. He studies how technology shapes learning across formal and informal settings and the ethical implications of using technology. He publishes broadly in the fields of engineering and computing education, and educational technology. His research has been recognized with several best paper awards and his edited volumes *Cambridge Handbook of Engineering Education Research (CHEER)* and *International Handbook of Engineering Education Research (IHEER)* received the Best Book Awards from Division I of AERA in 2015 and 2024, respectively. He served as a Fulbright-Nokia Distinguished Chair in ICT at Aalto University, Finland (2021) and he is a past recipient of the NSF Early Career Award (2009), the University Teaching Excellence Award (2002) and the Mentoring Excellence Award (2022) for undergraduate research at George Mason University. He was awarded a Ph.D. in Learning Sciences & Technology Design (2007) from Stanford University, Palo Alto, CA. More information is available at: <http://mason.gmu.edu/~johri>



Fun fact: The first civil engineering college in Britain - Cooper's Hill - was started only to prepare engineers for the British Raj in India.

Diana Bairaktarova (Virginia Tech)

Diana Bairaktarova is an assistant professor in the Department of Engineering Education. She is also an affiliate faculty in the Department of Mechanical Engineering and a Faculty in the Human-Centered Design at Virginia Tech. Diana has over fifteen years of experience working as a Design and Manufacturing Engineer. Before joining Virginia Tech, Diana was an assistant professor of engineering practice in the School of Aerospace and Mechanical at the University of Oklahoma. She taught several fundamental and engineering design courses, where the design of artifacts was addressed from a multidisciplinary perspective and implementation of design thinking framework. As an engineer with extensive industry experience and an engineering education researcher with knowledge of how people learn, Bairaktarova aligns her research, teaching, and service with the mission of creating and supporting an innovative and inclusive engineering profession for the 21st century.



Fun fact: In 1965, a Bulgarian engineer named Ivan Marangozov invented a unique computer input device that allowed users to interact with a computer without touching it — by drawing in the air. It was part of a system called TELLUS, which was an early gesture-based interface, decades before modern motion-sensing tech like the Kinect or VR systems. This invention made Bulgaria one of the pioneers in human-computer interaction — way ahead of its time!

Euan Lindsay (Aalborg University)

Professor Lindsay is the Professor of PBL and Digitalisation in Engineering Education at the Aalborg Centre for Problem Based Learning in Engineering Science and Sustainability (UCPBL). Euan's academic career has been spent at the frontiers of the discipline of engineering education. He is best known for his work in developing pioneering new models of engineering education that combine the authenticity of work- and problem-based learning with the flexibility of digitally enabled curricula. He has two decades' experience in the digitalisation of engineering education, exploring what and how student engineers learn in digitally supported environments.

During his academic career, Euan has held a number of leadership roles in engineering education, serving as Dean, Head of School and Foundation Professor. He has been invited to give keynote presentations around the world, ranging from the UK to China to Bahrain. He is frequently invited to speak at panel sessions with themes like "Dangerous Ideas" or "Great Leaps Forward". He serves on a number of advisory boards related to innovation and quality assurance in Engineering education, and is a Fellow of both Engineers Australia and the UK Higher Education Academy.

Euan believes most major challenges facing society today can be solved by engineers, including providing clean drinking water, energy sustainability or communications technology to keep people connected. He is excited about developing new engineering programs with a focus on making a difference, not just solving problems and making things, and hopes to inspire students to move forward in their careers with passion.



Fun fact: Australia actually invented wi-fi ... like so many inventions, we didn't commercialise it – but we did come up with the idea.

Greet Langie (KU Leuven)

Greet Langie is a full professor at the Faculty of Engineering Technology, KU Leuven (Belgium). Her main research line within Engineering Education Research involves transitioning engineering students (from secondary education to higher education and from higher education to professional life). She's a member of the board of LESEC (Leuven Engineering and Science Education Center) of which she was the first chair and she is the former vice dean of education of the Faculty of Engineering Technology (KU Leuven). At international level, she is actually the vice-president of SEFI (European Society for Engineering Education) and she's an associate editor of the European Journal of Engineering Education.

Fun fact: Belgium is home to the world's only museum dedicated entirely to French fries!

It's called the Frietmuseum, located in Bruges, and it explores the history of the humble fry — **which Belgians claim to have invented**. So, we should call them Belgian fries instead of French fries 😊.



Muhsin Menekse (SMU Lyle School of Engineering)

Dr. Muhsin Menekse is Texas Instruments Distinguished Chair and Professor of Computer Science at SMU. He was a Professor of Engineering Education at Purdue University between 2015-2025. He was also the Director of the Student Engagement Research at the Institute for Pre-12 Engineering Research and Learning (INSPIRE), and a Research Faculty at the Center for Advancing the Teaching and Learning of STEM (CATALYST) at Purdue. Dr. Menekse is the recipient of the William Elgin Wickenden Award by the American Society of Engineering Education. A hallmark of Dr. Menekse's career is his leadership in securing competitive funding for projects from diverse funding streams with strategic partnerships across disciplines. His funded projects aim to foster a deep understanding of key engineering and science principles and apply these in real-world contexts. Since 2015, he has excelled in leadership roles (PI or co-PI) in 13 different projects totaling \$15.89 million. His research has been funded by grants from the National Science Foundation (NSF), the Institute of Education Sciences (IES), the U.S. Department of Defense (DoD), the Purdue Research Foundation (PRF), and Lilly Endowment Inc.



Fun fact: Göbekli Tepe is a prehistoric hilltop sanctuary near Şanlıurfa in southeastern Turkey. Built in the Pre-Pottery Neolithic (roughly 9600–8200 BCE), it consists of circular and oval enclosures carved into bedrock and ringed with stone walls. It is among the earliest known monumental ritual sites, millennia older than Stonehenge or the pyramids, suggesting large ceremonial building preceded fully developed farming.

Lelanie Smith (University of Pretoria)

Prof Lelanie Smith is the Head of Community Engagement and Curriculum Transformation for the Faculty of Engineering, Built Environment and IT at the University of Pretoria, South Africa. She is also the principal lead for the Royal Academy of Engineering funded Innovative Engineering Curriculum project with UCL and responsible for project strategy and systemic change design, ensuring coherence and strategic alignment across partners. She is responsible for coordinating inter-institutional collaboration, strategic stakeholder engagement, and the



integration of change initiatives across specialist focus areas. Prof. Lelanie Smith also co-directs the African Engineering Education Research Network (EERN-Africa) and serves as the coordinator of the European Funded Intra-Africa Mobility Grant, supporting regional collaboration and academic development. Her leadership is supported by a dedicated systemic transformation coach and change facilitation lead, ensuring that transformation efforts are both cohesive and sustainable.

Fun fact: South Africa performed the world's first successful heart transplant in 1967.

Susan Lord (University of San Diego)

Susan M. Lord is Professor and Founding Chair of Integrated Engineering at the University of San Diego (USD) in the USA. She received a B.S. from Cornell University in Materials Science and Electrical Engineering (EE) and the M.S. and Ph.D. in EE from Stanford University. Her research focuses on the study and promotion of equity in engineering including student pathways and inclusive teaching. She is passionate about changing the culture of engineering to be more welcoming and holistic. Dr. Lord is among the first to study Latinos in engineering and coauthored *The Borderlands of Education: Latinas in Engineering*. She was on the NSF-sponsored Revolutionizing Engineering Education (RED) project “Developing Changemaking Engineers” at USD. She is currently working on an NSF-sponsored project to integrate sociotechnical issues in electrical engineering starting with the Introduction to Circuits class. She is Co-Director of the National Effective Teaching Institute (NETI). Dr. Lord is a Fellow of the IEEE and ASEE and is active in the engineering education community. Dr. Lord is the 2018 recipient of the IEEE Undergraduate Teaching Award.



Fun fact: Recommendation for everyone interested in engineering education: *Hidden Figures* by Margot Lee Shetterly - Story of amazing women who contributed to USA Space Program Book is better but movie is also good.

Tom Børsen (Aalborg University)

Tom Børsen is an Associate Professor at the Department of Sustainability and Planning, Aalborg University, Denmark. He is a pioneer in integrating social sciences and humanities (SSH) into engineering education, with a focus on fostering ethical awareness, interdisciplinary collaboration, and real-world problem-solving. As a key architect of the Techno-Anthropology program, Tom has developed innovative pedagogical strategies that prepare students to address complex societal challenges. His work is inspired by Critical Pedagogy, Science and Technology Studies (STS), and Engineering Ethics. He has authored and co-edited numerous special journal issues, books, and articles. With extensive experience supervising over 35 PhD and MSc students, he has guided research at the intersection of engineering, ethics, and education. His contributions extend beyond Aalborg University, as he actively shapes international discourse through his role in SEFI's Ethics Special Interest Group and his collaborative scholarship. Tom's approach exemplifies how engineering education can be both technically rigorous and socially responsible, making him a recognized voice in advancing interdisciplinary, ethically anchored learning environments.



Fun fact: Denmark is home to the world's oldest still-functioning amusement park - Bakken. It opened in 1583.

Participants' bio & Fun fact

Amdad A. Awsaf

I am Amdad A. Awsaf, a PhD candidate in STEM Education at Florida International University. My research focuses on how contextual STEM learning experiences shape identity and influences educational pathways. I am particularly interested in exploring different learning environments and their role in fostering curiosity, creativity, and persistence in STEM. Outside of my academic work, I enjoy fishing and playing table tennis.

Fun fact: My hometown, Sylhet, Bangladesh, is called the 'Land of Two Leaves and a Bud' because of its world-famous tea gardens.



Animesh Paul

I'm Animesh "**OH-nee-mesh**" (he/they), a PhD candidate in Engineering at the University of Georgia in Athens, GA. I blend methodological approaches with activist practice to highlight the joy and strengths of queer communities within engineering. My research centers LGBTQ+ engineers' experiences, aiming to advance both scholarly understanding and more inclusive practices in the field. Outside of academia, I love to cook, and I hold a degree in painting, a passion I someday hope to bring into engineering education research.

Fun fact: India is home to the world's only [floating post office](#), located on Dal Lake in Srinagar. It was inaugurated in 2011 and handles regular mail, boats pull up alongside to pick up and drop off letters and parcels.



Baatseba Ramushu

Baatseba Ramushu is a PhD candidate in Engineering Education and a research assistant at the University of Johannesburg, South Africa. Her research focuses on enhancing engineering students' sense of belonging through orientation week experiences, including the evaluation of the design and implementation of inclusive orientation week programmes. With experience in gender-responsive and inclusive pedagogies, Baatseba is passionate about designing support initiatives that help to create welcoming learning environments, foster student success, and help underrepresented undergraduates thrive, particularly in STEM fields.



Fun fact: Guided by the spirit of Ubuntu, South Africa ranks among the happiest countries in Africa and globally. Despite our challenges, we still know how to dance, laugh and braai.

Emily Buten

I'm currently a PhD candidate in the Engineering Education Research program at the University of Michigan. The goal of my research is to help all students transition to the workforce by investigating how students are currently developing holistically during their education. My dissertation investigates undergraduate student perceptions of professional/transversal skills, how they develop those perceptions, and how those perceptions impact their motivation and ability to develop the skills. I hope to use my research to create and support inclusive and effective professional development opportunities so all students feel supported in their transition out of college. Outside of research, I love spending time outdoors (especially with my dog) and reading books.



Fun fact: I am from the United States, specifically from Kentucky where 95% of the world's bourbon is produced.

Gibin Raju

Dr. Gibin Raju is a Postdoctoral Researcher in Engineering Education in the Department of Multidisciplinary Engineering at Texas A&M University. He holds a Ph.D. in Engineering Education from the University of Cincinnati. Dr. Raju's research explores transformative learning, creativity, critical thinking, spatial skills, and engineering design, with a focus on cognitive stress, cognitive load, and STEM accessibility. He strives to identify, adopt, or adapt knowledge from various discipline-based education research (DBER) literature to enhance the preparedness and efficacy of engineering educators across different educational levels. Through an integrated, holistic framework, his work advances workforce development, strengthens engineering education pathways, and promotes broader participation in STEM. By equipping educators with strategies to personalize instruction and support professional identity formation, Dr. Raju helps prepare the next generation of engineers to succeed in a dynamic, global landscape. In recognition of his contributions to engineering education research, Dr. Raju was awarded the 2025 Apprentice Faculty Grant (AFG) by the Educational Research and Methods (ERM) Division of the American Society for Engineering Education (ASEE).



Fun fact: India was the first country to detect water on the Moon, thanks to its Chandrayaan-1 mission in 2008.

Hanna Aarnio

Dr. Hanna Aarnio is a postdoctoral researcher and educational scientist specializing in engineering and technology education. She works at Eindhoven School of Education (TU/e) on a large-scale project investigating the impact of challenge-based learning across bachelor's programs. Her research interests include multi-, inter-, and transdisciplinary education, active learning approaches, teacher collaboration, and doctoral education.

Fun fact: Did you know that Finns drink coffee more than anyone else in the world? The average consumption is around four cups per day per person.



Irene Magara

Irene Magara is a PhD student in Engineering with a specialization in Engineering Education Research at the University of Nebraska–Lincoln (UNL). With over ten years of experience teaching and mentoring undergraduate engineers, she serves as Assistant Advisor to the UNL undergraduate Society of Women Engineers (SWE) and coordinates the UNL Engineering Education Research Graduate Student Seminar Exchange Program. Irene is an active member of the Engineering Education Research Network–Africa, the American Society for Engineering Education (ASEE), the IEEE Education Society, and SWE, and she served as Chair of IEEE Women in Engineering Uganda Section from 2022–2024. Her research interests include the design and evaluation of student assessments; faculty decision-making and well-being; the translation of engineering ethics education into practice; and professional skills development among engineering students.



Fun fact: Uganda is the birthplace of the beloved street food Rolex, a warm chapati rolled around a spiced omelet and fresh veggies. In Kampala (Uganda's capital city) alone, thousands of Rolex stalls can be found, making it one of the city's most popular grab and go meals. I often make Rolex here in the USA, and it reminds me of home.

Kaitlyn Thomas

I am thankful that I landed in the engineering education research space because pursuing this research path was not my first plan. It was not a plan that I knew existed until I was already enrolled in the civil engineering PhD program at University of Nevada, Reno (UNR). After completing my master's in civil engineering and working in industry for three years, I knew firmly that I wanted to teach at the collegiate level. The next step toward my goal was to pursue a PhD in civil (structural) engineering, which was my background and specialty. I was clear in my application and interviews that I wanted teaching to be a large part of my PhD experience, and my civil engineering advisor at UNR worked with me to find as many opportunities as possible. She pointed me toward the engineering education program under Dr. Adam Kirn. I thoroughly enjoyed engineering education research (EER) and enjoyed working with my research group. I was able to explore the wild frontier of EER, eventually landing on epistemology and epistemic injustice as my main theoretical frameworks. I was introduced to social justice work in engineering contexts, and I recognized the need for social justice awareness and action. This is where my interest lies in EER, which is why I explored aspects of epistemic injustice in my dissertation.

The goal of all my research projects is to identify practices that support justice and care for all engineering students, professors, administrators, and staff. My dissertation topic is on epistemic injustice toward women in engineering, and I explore the topic to identify practices in engineering learning environments that dissuade women to pursue engineering and may be potentially destructive to their wellbeing. I contribute to multiple research teams investigating topics about trauma, either from the perspectives of undergraduate students or graduate program directors (GPDs). Both projects emphasize identifying practices to support students as they experience trauma and the care required to handle the experiences appropriately.

Fun fact: My country of birth is the United States, so there are plenty of fun facts I can choose from. Something interesting on the date of my birth, June 24, 1993, was that news was dominated by the Unabomber attack on the Yale professor via mail parcel. It was the second attack in two days. Thankfully, I have no recollection of this.



Figure 1: Me, 10 years ago getting my master's in civil engineering



Figure 2: Me, this year on the best trip of my life in Edinburgh

Luke Dokter

Luke Dokter, originally from Australia, is pursuing a Doctorate in Engineering Education at University College London, affiliated with the Centre for Engineering Education. He holds a Bachelor's degree in Engineering and a Master's in Environmental Geology. His fieldwork in disaster and conflict zones led to the co-founding of Engineers Without Borders Norway. Prior to his current role as Programme Head and Lecturer at the Norwegian Defence University College, he developed innovative water and sanitation systems for humanitarian contexts. His research explores global competency development and leadership identity among engineering undergraduates in Norway.



Fun fact: Australia's most deadly spider the Newcastle Funnel-web, previously thought to be part of another species, was only officially recognised as its own species in 2025!

Margaret (Maggie) Webb:

Margaret (Maggie) Webb is a Postdoctoral Research Fellow at Cornell University's Center for InterDisciplinary Education Research (CIDER). She earned her PhD in Engineering Education and MS in Civil Engineering from Virginia Tech, along with a BS in Mechanical Engineering from Rice University. Maggie's research uses systems, identity, motivation, and learning theory to understand how institutional structures impact faculty and student development in STEM graduate education. She focuses on interdisciplinary and participatory collaboration, graduate mentorship practices, and supporting "academic



boundary crossers"—scholars who push disciplinary boundaries to address complex societal challenges. Before academia, Maggie worked as a mechanical engineer and taught high school STEM. Her passion for interdisciplinarity in engineering education stems from growing up in New Orleans, Louisiana (USA) where experiencing hurricanes firsthand showed her these were chaotic, emergent problems that engineers couldn't solve alone. Outside of work, Maggie enjoys cooking/baking, trail running, yoga, and exploring new places.

Fun fact: New Orleans is home to the Lake Pontchartrain Causeway, the world's longest continuous bridge over water at ~24 miles (39 km) long!

Mary Nolan:

Mary Nolan is a Chartered Engineer and lecturer at Atlantic Technological University (ATU) Sligo, where she has taught since 2013. She holds a primary degree in Industrial Engineering and a Master's in Engineering Design from NUI Galway. Prior to academia, she worked for 13 years in medical device manufacturing, specialising in manufacturing engineering and process improvement. Mary initiated and led the ATU Sligo Engineering & Technology Expo for four years, connecting students, industry, and the wider community. She is currently pursuing a part time PhD at University College Dublin focused on ethics of care in engineering education. Mary is Vice Chair of the Engineers Ireland Academic Society and an active member of the SEFI Ethics SIG.



Fun fact: I grew up in rural Mayo, where the bog was part of everyday life and summers were spent footing turf for the fire. But these bogs hold far more than fuel. In north Mayo, beneath layers of peat, archaeologists uncovered the Céide Fields, the world's most extensive Neolithic field system, dating back over 6,000 years. Ireland's bogs are naturally acidic and low in oxygen, preserving artefacts for millennia. Among the most curious discoveries is "bog butter", buried lumps of butter over 2,000 years old, some of which were still technically (sort of) edible when unearthed

Matthew Cairns:

In June 2023, I graduated from Queen's University Belfast with a BEng in Mechanical Engineering. Education has been an interest of mine for some time. Prior to beginning my undergraduate degree, I have seen teaching as a favourable career path and planned to complete a PGCE (Post Graduate Certificate in Education) after graduation, enabling teaching in either primary (ages 5-11) or secondary school (ages 11-18). As a result of my ongoing interest in education, when a PhD in this field was advertised it was an opportunity I was keen to explore. I was subsequently accepted for the position and began in October 2023 as the first engineering education-based PhD student within the School of Mechanical and Aerospace Engineering (SMAE) at QUB. My research is centred around the title: "The impact of optionality and co-design within engineering major project modules."



Fun fact: My home city has burned down twice (a long time ago!), leading to it being renamed Lisburn!

Meryn McNea:

Meryn McNea is a final-year PhD student at the University of Limerick, Ireland. With a background in technology education, her doctoral research examines “The Impact of Societal Perceptions of Spatial Ability in Engineering Education,” hypothesising that such perceptions contribute to the gender gap in enrolment and retention. She has taught technology and engineering education at both secondary and tertiary levels, and her teaching and research are motivated by a commitment to advancing gender equity in STEM. She has presented her work at the CDIO, SEFI, and Spatial Cognition conferences, and has authored three conference papers, delivered a conference workshop, and has a journal article currently under review.



Fun fact: Meryn grew up on a small island off the west coast of Ireland, which was recently ranked 8th in the world on Big 7 Travel’s prestigious list of the Top 50 Most Beautiful Islands.

Michael O'Connell

My name is Michael O'Connell. I am currently a PhD student with Chalmers university of technology in their engineering education research division and will be defending my thesis in late September. My research explores collaborative learning in interdisciplinary project-based courses with a special emphasis on social regulation of learning. In addition to my research I am also helping teach two pedagogical courses in the university. One for staff which I co-designed, and one for PhD students which I helped re-design for online delivery and my own version of the course.

Before joining Chalmers I was an Instructional Designer and Educational Technologist with the Institute of Technology Tralee. This involved designing online courses for the university lecturers and occasionally for outside projects or organizations. I also provided training and support for lecturers in relation to e-learning. Before that I was a software tester for a number of companies.



Fun fact: Irish monks are the reason we have spaces between words in Europe. After the fall of the western roman empire Irish monks and monasteries became centers of learning and over time when copying manuscripts in Latin the Irish monks began to introduce spaces between words and punctuation.

Peiyun Xu

My name is Xu Peiyun, and I am a Ph.D. student at the School of Public Affairs, Zhejiang University, specializing in engineering education research. I have long been interested in improving education by reducing “pointless homework” and creating learning environments where students work less but gain more. During my graduate studies, I discovered how values like efficiency, quality, and applied innovation can transform learning. I have participated in projects exploring innovative teaching methods, such as design-based learning and communities of practice, and spent last year at University College London studying overseas models, including the Integrated Engineering Programme (IEP). These experiences inspired me to focus my Ph.D. research on authentic engineering learning.



I have observed that many engineering students spend years mastering technical content yet struggle to see its relevance, perceived-value or apply it to complex, real-world problems. This gap can hinder problem-solving ability and weaken professional identity. My dissertation explores authentic learning approaches that immerse students in real-world contexts, solving problems, designing products, and collaborating with industry or communities to “think and act as professional engineers.” It addresses three key questions: (1) What are the main characteristics of authentic engineering learning, and how can they be measured? (2) How does authentic engineering learning shape engineering students’ professional identity? (3) How can authentic engineering learning be promoted and implemented in higher education?

I am very grateful for the opportunity to participate in the SEFI Early Career Researchers' Club. I plan to complete my Ph.D. next year and hope to pursue a career as an engineering education researcher. I look forward to learning from all of you—gaining insights on research perspectives, methodologies, and how to become a responsible, innovative, and impactful scholar.

Fun fact: Hangzhou, China is renowned for West Lake, a UNESCO World Heritage site that has inspired poets for over a thousand years. Yet beyond its timeless beauty, Hangzhou is often called “China’s mini Silicon Valley” — the birthplace of tech giants like Alibaba and now a hub for leading AI innovators such as DeepSeek. In this city, it’s not unusual to find someone writing poetry in a lakeside café in the morning and training neural networks in the afternoon.

Rachel E. Higbee

Rachel is an NSF Graduate Research Fellow and PhD Candidate in Engineering Education at Purdue University in the United States. She previously earned a BS in Civil Engineering from LeTourneau University and MS in Environmental Engineering from Purdue. Rachel's current research focuses on assessment of K-12 environmental justice curriculum, but she also has experience in curriculum writing, K-12 microelectronics, photochemistry, water quality, PFAS remediation, and disinfection.

Fun fact: The United States is the only country with all five major climate zones - tropical, subtropical, temperate, polar, and subpolar.



Rozali Badaoui

I hold a master's degree in Business Management from the Lebanese University and am currently pursuing a PhD jointly at IMT Atlantique and ENSTA Bretagne. My doctoral research focuses on integrating no-tech, low-tech, and high-tech solutions—such as immersive technologies—into higher education to enhance classroom management, foster student engagement, and strengthen ethical governance. In particular, I examine how innovative technologies can be adopted while safeguarding privacy, with a special emphasis on applications in engineering education.

Fun fact: Lebanon is the ancestral home of the Phoenicians, the master sailors and traders who connected the ancient Mediterranean and are credited with spreading the alphabet that shapes many of the world's languages today. Known in antiquity for their rare purple dye, they left a legacy of creativity, resilience, and global exchange. Today, Lebanon remains a crossroads of continents, religions, and cultures, where diverse communities have lived side by side for centuries. It is like a history book you can walk through, with Phoenician ports, Roman temples, Crusader castles, Ottoman souks, and modern cities all within easy reach. In a fitting continuation of its seafaring heritage, more Lebanese now live abroad than in Lebanon itself, forming a vibrant diaspora that carries the country's spirit to every corner of the globe.



Rubaina Khan

Rubaina Khan is a research associate at Queens University, Canada. Prior to this position she was teaching engineering design and teamwork processes as an assistant professor at University of Toronto. She is also a doctoral candidate within the Department of Curriculum, Teaching, and Learning at the Ontario Institute for Studies in Education (OISE) at the University of Toronto. She has an M.A. in Curriculum and Pedagogy from the University of Toronto and an M. Sc. in Computer Control and Automation from the Nanyang Technology University in Singapore. She has worked at MIT developing navigation technologies for underwater robotics that were used to model and predict environmental issues in the coastal regions of Singapore. Her interest in engineering education led her to take up a position as a lecturer at Singapore Polytechnic.

She spent five years developing interdisciplinary engineering design courses and designing state-of-the-art studios integrated with makerspaces. Her current research interest lies at the intersection of engineering design education, socio-technical thinking, learning communities, and identity formation.



Fun fact: I was born in Dubai where they have ATMs that dispense actual gold bars!

Samuel (Sam) Snyder

I received my PhD from Virginia Tech in Engineering Education in 2024 with a focus on faculty development and ethics education. I am currently at FIU in a Postdoctoral Fellowship on an NSF grant examining the role of a postdoctoral cohort on professional and personal development through collaborative inquiry.

Fun fact: Americans tend to eat about 100 acres (40 hectares) of pizza every day



Shameela Arbi

As a doctoral research candidate at the University of Cape Town in South Africa, my personal history and academic journey through engineering have fostered a scholarly and practical interest in engineering education. My career background includes a bachelor's degree in electromechanical engineering and a master's in biomedical engineering, with my doctoral work intended to contribute towards the diversity, equality and inclusion of engineering. Currently, my thesis is entitled: 'The Influence of Social Structures on the Identities of Women Students in Engineering in Two National Contexts.' and focuses on determining the social influences on the experiences of women students in engineering in both Germany and South Africa.

My current goals are heavily focused on completing my PhD and finding a post-doc or a similar research position to continue my work in addressing inclusivity in engineering. In my – very limited – free time, I enjoy reading, writing, and baking.



Fun fact: I currently live and work in Cape Town, but my country of birth is Botswana, which is just north of South Africa. It's a diamond-rich, desert-like, scarcely-populated country abundant in wild animals and tourism. Interestingly, it has the largest population of African elephants, and has the only river in the world (Okavango River) that does not flow towards the ocean.

Shukufe Rahman

Dr. Shukufe Rahman is a Visiting Assistant Professor in the Department of Engineering Education at Ohio State University. She holds a B.Sc. and an M.Sc. in Applied Physics, Electrical and Communication Engineering from the University of Dhaka, Bangladesh, and a Ph.D. in Science Education from Indiana University, Bloomington. Her research focuses on developing teaching and learning materials that integrate an entrepreneurial mindset, helping engineering students connect their values with the societal impact of their designs and recognize how engineering can transform communities.

Fun fact: Bangladesh has the highest number of "green" garment factories in the world.



Umawathy Techanamurthy:

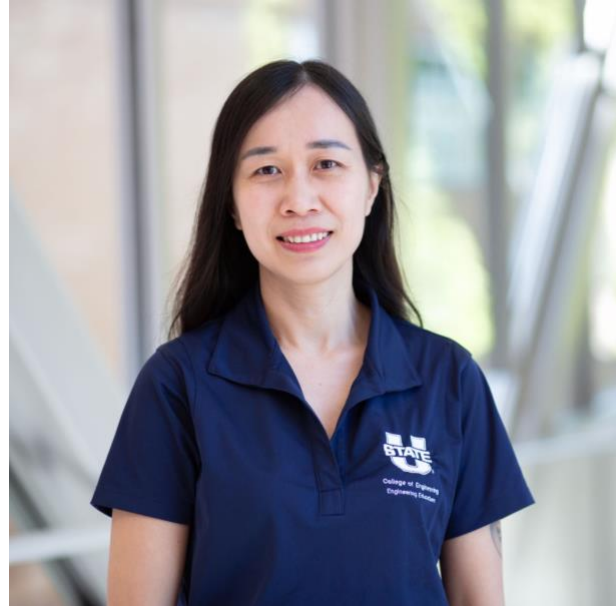
Dr. Umawathy Techanamurthy is currently a lecturer at the Engineering Education Department, Faculty of Engineering and Built Environment, National University of Malaysia(UKM), Bangi, Malaysia. Prior to this, she was a Senior Assistant Director at the Instructional and Digital Learning Division, Department of Polytechnic and Community College Education, Ministry of Higher Education (MOHE), Putrajaya from July 2018 to Dec 2022. Prior to that, she was a lecturer at Kolej Komuniti Selayang and Kolej Komuniti Hulu Selangor where she taught Multimedia related subjects. She received her PhD in Instructional Technology from University Malaya in 2018. Her PhD thesis is entitled the Development of a Flipped Classroom Module based on Problem-Solving for Community Colleges. Her current interests are in instructional design, new pedagogies and use of technology for knowledge gain and problem-solving skills development.



Fun fact: Malaysia is home to four UNESCO designated World Heritage Sites, including the Gunung Mulu National Park, the Kinabalu Park, the significant cities of Melaka and George Town, and the Lenggong Valley, which is an important archaeological heritage site.

Vanessa Tran:

I'm Vanessa Tran, a PhD student in Engineering Education at Utah State University. Originally from Vietnam, I have a background in both Civil Engineering and Industrial Engineering. During my first two years in the program, I worked on the NSF BPE proposal project Audio for Inclusion: Uncovering the Narrative of Minoritized Students to Provide Insight to Faculty on the Known Unknowns of Inclusion, coordinating nationwide faculty recruitment, facilitating focus groups, and co-authoring qualitative research publications. As a woman in engineering, I understand firsthand the challenges faced by minoritized groups, which



informed my contributions to this work. I am now beginning my dissertation research on the role of mindfulness in supporting motivation and emotional regulation during problem-solving tasks among undergraduate engineering students, and I look forward to gaining knowledge and skills through this club's activities that will help advance my research and allow me to share meaningful insights in the future.

Fun fact: I'm from Vietnam, and here's a fun cultural fact about my country: in traditional Vietnamese culture, age isn't counted from your birthday. Everyone is considered 1 year old at birth, and we all turn a year older together at Tết (Lunar New Year). This means a baby born a day before Tết could already be counted as 2 years old within 2 days! While many people in modern urban areas now follow the Western custom of celebrating birthdays individually, the Tết age-counting tradition remains cherished, especially among older generations and in rural communities.

Xiaolu Rui:

Hi! My name is Xiaolu Rui, and Rui is my preferred name, it is pronounced like "Ray" in X-Ray. I'm a first-year PhD student in Eindhoven University of Technology, Netherlands. My research focuses are teachers and teaching assistants, their professional development and collaboration, and active learning methods, especially challenged-based learning, in higher education. I have a background of learning science and educational technologies. Outside of work, I like playing video games and knitting.

Fun fact: An interesting fact about my country of birth: I'm originally from China. There is a clinic for "Spatial and Mathematical Learning Difficulties" in Shanghai Children's Medical Centre without age restriction.

