

Tentative Conference Schedule Norris University Center (2nd floor) Northwestern University

Friday June 6

Registration, 5:00 - 7:00 PM, Louis North and South

Welcome Reception, 5:30 – 6:30 PM, Louis North and South Host: Sylvester Johnson (ETHICS-2025 Conference Chair)





Opening Plenary Session, 6:30 - 7:30 PM, Louis North and South

When Innovation Meets Injustice: Navigating the Ethical Frontiers of Face Recognition Technology

Welcome and Speaker Introduction: Sylvester Johnson, Northwestern University

Speaker: Michael King, Harris Institute for Assured Information, Florida Institute of Technology

Saturday June 7

Registration, 7:45 AM - 4:30 PM, Louis North and South

Breakfast, 7:45 - 8:30 AM, Louis North and South

Plenary Session, 8:30 – 10:00 AM, Louis North and South Interdisciplinary Approaches to Data Equity and Responsible Al Design

Welcome: Murty Polavarapu, Space Electronics Solutions (IEEE-SSIT President)

Speaker Introduction: Heather Love, University of Waterloo (ETHICS-2025 Organizing Chair)

Speaker: Lai-Tze Fan, Canada Research Chair of Technology and Social Change, University of Waterloo

Note: The complete conference schedule, including abstracts for all sessions, papers, and posters will be posted on the conference website.

Refreshment Break, 10 - 10:30 AM, Louis North and South

Parallel Sessions, 10:30 AM - Noon

Session A1, Lake – Panel: Ethics and Equity in the Engineering Classroom

Moderator: Brent Jesiek, Purdue University (Director, National Institute for Engineering Ethics) Panelists: Fenella Amarasinghe, Renato Bezerro, Carter Neal, Alexi Orchard, Janna Rosales

Session A2, Northwestern A – Papers: Ethical Issues with Emerging Technologies

Chair: Murty Polavarapu, Space Electronics Solutions (IEEE-SSIT President)

- 1. Targeting Teens: Social Media Weapons Marketing, Hannah Soria and Stacy Doore
- 2. Deepfakes and Contextual Integrity Violations, Emily LaRosa and Sherri Conklin
- 3. Perhaps it All Boils Down to Language: Relational Turns and Ethical Challenges in Human-Robot Interaction, Bo Kampmann Walther
- 4. Beyond Critique: Bringing the Humanities into Technology Research, Oliver Shuey, Kereshmeh Afsari, Venus Azamnia, Casey Burning, Lyndon Frommer, Ashley Shew and Damien Williams
- 5. Human Dignity and the Ethics of Artificial Intelligence: A Framework for Responsible Design and Use from the Perspective of Catholic Social Teaching, Joseph Laracy, Vassilka Kirova, Cyril Ku and Thomas Marlowe

Session A3, Northwestern B - Papers: Organizational Responses to Al

Chair: Andrew Taylor, Tennessee Valley Authority (Past Board Chair, National Institute for Engineering Ethics)

- 1. Press Release Ethics in Al: Performative Ethics in For-Profit Al Companies, Amanda Potasznik
- 2. A Conceptual Framework for Guiding the Workforce on Using Responsible AI, Alvin Chin, Lav Varshney, Gagandeep Singh, Jeremy Riel, Rukmini Avadhanam and Vishal Sachdev
- 3. Compliance is Necessary but Not Sufficient in AI, Lee Barford
- 4. Al and the Rule and Role of Law: Reshaping Legal Regulatory Frameworks to Address Emerging Challenges, Chee Hae Chung
- 5. The Role of Artificial Intelligence in Project Management, Faisal Kalota, Benedicta Frema Boamah, Nikitha Manjunath and Grant Witty

Session A4, Arch – Workshop: IEEE Neuroethics Framework World Café

Facilitators: Laura Cabrera and Rebecca Monteleone

Lunch, 12:00 - 1:00 PM, Louis North and South

Parallel Sessions, 1:00 - 2:30 PM

Session B1, Lake - Panel: What is Public Interest Technology? The Midwest Answers

Moderator: Casey Canfield

Panelists: Sylvester Johnson, Francisca García-Cobián Richter, Susan Paykin, Lisa Frazier, Kelsey Badger and Nathan Ensmenger

Session B2, Northwestern A - Papers: Transparency, Explainability and Trust in Al Systems

Chair: Sara Wilson, University of Kansas (Board Vice-Chair, National Institute for Engineering Ethics)

- 1. Increasing Transparency Through Metaphor Criticism, Fernando Nascimento and Eric Chown
- 2. A Model for Using Ethical Theory to Specify Epistemic Goals for Explainable Al. Sherri Conklin
- 3. Trust in Persuasive Technologies: A Systematic Literature Review, Parinda Rahman and Ifeoma Adaji
- 4. Understanding Explainability in Recommender Systems-User Insights and Perspectives, Abtin Karimi Malek Abadi, Faisal Kalota and Atefeh Jamil Pour
- 5. Are Deception, Limitation, and Guidance problems for transparent AI? Samuel Musker

Session B3, Northwestern B - Workshop: Engineering Education for an Ethical Future: Equipping Engineers for Emerging Technologies Facilitators: Siobhan Oca, Cameron Kim, Stacy Tantum

Session B4, Arch - Workshop: Ethical Al and Oversight: Hands-on applications of MLOps and Al governance

Facilitators: Prahlad Sarma, Thomas Tirpak, Ganesan Keerthivasan

Break, 2:30 - 2:45 PM, Louis North and South

Parallel Sessions, 2:45 – 4:15 PM

Session C1, Lake - Panel: Engineering Meets Philosophy: Creating Ethically-Behaving Al Agents

Moderator: Nathaniel Kremer-Herman

Panelists: Ankur Gupta, Tyler Cook, Eric Severson, Yixiao Wang

Session C2, Northwestern A – Papers: Ethical Frameworks for Emerging Technologies

Chair: Nael Barakat, University of Texas at Tyler (Board Chair, National Institute for Engineering Ethics)

- 1. Ethically Aligned Design in Autonomous and Intelligent Systems: An Overview, Andrew Burnside and Emerson Bodde
- 2. Invariance as Test of Ethical Theories for Use in Social Implications of Technology, Anne Denton
- 3. The Digital Oath: Fostering Human-Centered Technology through Collaborative Positive Ethics, Marianne Najm, Chiara Sammarco, Dominik Knoll and Marco Sanchioni
- 4. The Stability Dilemma: Addressing Uncertainty in Public Sector AI, Marc Elliott and Deepak P
- 5. An Experimentalist Approach to Ethical Governance of Emerging Technologies, Dazhou Wang

Session C3, Northwestern B - Papers: Ethics Research in Engineering and Computer Science Practice and Education

Chair: Steven Kelts, Princeton Center for Information Technology Policy

- 1. Critical Incidents in Ethical Engineering Research: Stories from Biomedical Engineering Faculty, Justin Hess, Tyler Ramsey, Nicholas Fila, Sowmya Panuganti, Allison Kerr and Andrew Brightman
- 2. Deconstructing Empathy for Social Responsibility in Engineering Education, Ordel Brown, Laura Pigozzi and Katherine Brichacek
- 3. Exploring Translational Ethical Competency (TEC) in Al Design: Conceptual Analysis and Methodological Reflections from a Pilot Study, Emad Ali, James Weichert, Yixiang Shawn Sun, Hoda Eldardiry, Qin Zhu and Dayoung Kim
- 4. Methodological Reflections on Designing Surveys to Explore Faculty and Administrator Perceptions of Al Ethics Education, Kylee Shiekh, Caitlyn Geraci, Deborah Mower, Glen Miller and Qin Zhu
- 5. CTRL + Empower: Lived Experiences of Black Women and Latinas in Computer Science at an Urban Public University, Amanda Potasznik, Arianna Fernandez, Samatrai Piam, Chaya Spencer, Kalysha Melendez Hernandez, Sophia de Oliveira and Daniel Haehn

Session C4, Arch - Workshop: Technology Training to Improve Justice for Underrepresented Populations

Facilitators: Laura Bingham and Leonard Bruce

Break, 4:15 - 4:30 PM

Parallel Sessions, 4:30 - 5:30 PM

Session D1, Lake – Presentations: New Perspectives on Engineering and Technology Ethics Education

Chair: , Davis Chacon-Hurtado, University of Connecticut

- 1. Engaging Students in Technology Ethics: The Responsible Tech Ambassador Initiative at New York Institute of Technology, Jennifer Griffiths and Noura El Habbal
- 2. Applied Ethics for Engineering Education, Prasanta Ghosh

Session D2, Northwestern A – Papers: Undergraduate Student Paper Session

Chairs: Abi Sipes and Aayan Agrawal

Session D4, Arch – Tutorial: Destination Public Trust: Applying Existing Ethical Framework to Emerging Technologies with a Clear Goal of Shared Understanding

Presenter: lanthe Bryant-Gawthrop, Public Responsibility in Medicine and Research (PRIM&R)

Poster Session, 5:30 - 6:45 PM, Louis North and South

Dinner, 6:45 – 8:15 PM, Louis North and South

Sunday June 8

Registration, 7:45 AM – 12:00 Noon, Louis North and South

Breakfast, 7:45 – 8:30 AM, Louis North and South

Plenary Session, 8:30 – 10:00 AM, Louis North and South Thoughtful Acceleration of Technology Transition

Speaker Introduction: Qin Zhu, Virginia Tech (ETHICS-2025 Co-Program Chair)

Speaker: Stefanie Tompkins, Provost, Colorado School of Mines

Refreshment Break, 10 – 10:30 AM, Louis North and South

Parallel Sessions, 10:30 AM - Noon

Session E1, Lake - Panel: The Routledge International Handbook of Engineering Ethics Education

Moderator: Diana Martin

Panelists: Heather Love. Qin Zhu. Rebecca Bates. Brent Jesiek, and Renato Bezerra.

Session E2, Northwestern A – Papers: Ethical Issues with Al Applications

Chair: Justin Hess (Deputy Director for Research, National Institute for Engineering Ethics)

- 1. Ethics and Persuasion in Reinforcement Learning from Human Feedback: A Procedural Rhetorical Approach, Shannon Lodoen and Alexi Orchard
- 2. EthicsBot: Fine-Tuning Open-Source LLMs to Assist Scientific Investigators in Analyzing Ethical Issues in Research, Spencer Hey, Charles Weijer, Julie Walsh and Eni Mustafaraj
- 3. The Ethical challenges and implications of Al-Based Text-Automation, Hesham Allam, Benjamin K. Gyamfi, Lisa Makubvure, Kwadwo Nyarko Graham and Kehinde Akinwolere
- 4. A Little Bit Goes a Long Way: Modeling Universal Basic Income for Noncooperative Artificial Agents, Maria Milkowski, Ankur Gupta and Nathaniel Kremer-Herman
- 5. Al in Education: Collaborative Annotation Apps, Gamification and Value Capture, Elisa Warford

Session E3, Northwestern B - Papers: Implications of Emerging Technologies for Human Health and Wellbeing

Chair: Ayanna Howard, Dean of Engineering, Ohio State University

- 1. Backcasting future human autonomy and ethics protection in smart health environments: a case study, Kaja Fjørtoft Ystgaard, Tuomo Tarmo Aatos Kuosa and Katrien De Moor
- 2. Simulating Vulnerability: An Examination of Ethical, Legal and Social Aspects in the Context of Training Child Protection Workers, Rau Michael, Jan-Oliver Kutza, Patrick Werth, Jan-David Liebe and Julius Schöning
- 3. Future human space missions and the procreative ethics: between human enhancement and antinatalism, Konrad Szocik
- 4. Exploring Public Perceptions and Ethical Concerns Regarding Neurotechnology, Saman Sargolzaei and Arman Sargolzaei
- 5. A Century After Jacobson v. Massachusetts: Public Health Ethical Perspectives of Large Language Models on Vaccination, Vamshi Mugu, Mahathi Kandimalla, Seetaram Ruthvik Mugu and Kshipra Sharma

Session E4, Arch - Workshop: Identifying Bottlenecks in the Ethical and Responsible Design of Al

Facilitator: Sherri Conklin

Lunch, 12:00 - 1:00 PM, Louis North and South

Parallel Sessions, 1:00 – 2:30 PM

Session F1, Lake - Panel: Supporting Ethical Frameworks & Practices

Moderator: Sylvester Johnson

Panelists: Leonard Bruce, Lisa Frazier, Laura Bingham and Shanna Crumley

Session F2, Northwestern A – Papers: Detecting and Mitigating Bias in Al Technologies

Chair: Rebecca Bates, Minnesota State University, Mankato (Ethics Committee Chair, American Society for Engineering Education)

- How Do Human and AI Gender Bias Interact in Hiring Decisions? Eyuel Getahun, Daniel Shank, Casey Canfield, Jessica Cundiff, Jenny L
 Davis and Celia Freed
- 2. DeepSeek and ChatGPT: Exploring Ethical Concerns in Al-Powered Platforms, Hesham Allam, Benjamin Gyamfi and Daniel Ahengua
- 3. Unveiling Occupational Gender Bias in Al: A Comparative Analysis of Text-to-Image Generation in ChatGPT and Gemini, Chandrima Chakraborty and Ayanna M. Howard
- 4. Risks to Financial Inclusion by Anti-Money Laundering and Financial Counterterrorism Algorithms, Katherine Grillaert
- 5. Trust, Ignore or Verify: Al Technologies, Patient Informed Consent and the Ethics of Health Care Al in Indian Public Health Settings, Debarati Sarkar, Garima Singh Verma, Praveen Kumar and Mona Duggal

Session F3, Northwestern B - Papers: Ethics Education in Engineering and information Technology

Chair: Alexi Orchard, University of Notre Dame

- 1. Psychological Measurement of Technology Ethics Education using the REGAIN Empirical Framework, Emily Foster-Hanson, Kerem Oktar, Tania Lombrozo and Steven Kelts
- 2. Sociotechnical Context Mapping for Responsible Innovation Pedagogy and Ethical Design, Marcel O'Gorman, Heather Love, R. Christopher Rogers, Rebecca Sherlock and Sarah Casey
- 3. Integrating Macroethics into Engineering Education: A Case Study of a Challenge-Based Learning Course on Brain on Chip Technology, Diana Martin, Gunter Bombaerts, Adam Watkins and Regina Luttge
- 4. Promoting Prosocial Software Design and Development for Student Projects, Raquel Diaz-Sprague and Alan Sprague
- 5. Investigating Student Learning of Human Rights in Engineering Education with Natural Language Processing of Educational Artifacts, Davis Chacon-Hurtado, Shareen Hertel, Minju Lee and Alexandra Paxton

Session F4, Arch – Workshop: Developing Ethical Al Competencies through Collaborative Learning: The STRAKER Approach Facilitators: Katherine Chiou and Qin Zhu

Break, 2:30 - 2:45 PM, Louis North and South

Parallel Sessions, 2:45 – 4:15 PM

Session G1, Lake - Panel: Scraping the Surface: Ethical Collection Practices in the Age of Al

Moderator: Jo Levv

Panelists: Greg Lindahl, Dana Mazia, Leonard Rosenthol

Session G2. Northwestern A - Papers: Cultural Perspectives on Emerging Technologies

Chair: Alvin Chin, Discovery Partners Institute, University of Illinois (Past-Chair, IEEE Chicago Section)

- 1. Impact Evaluation of Al Language Access Models for Indigenous Language Communities in the City of Los Angeles, Wendy Zeng, Matheus Ligeiro Dias, Antara Chugh, Asli Kocak, Sofia Renee Rodriguez, Smita Samanta, Eric Gong, Jae Wan Ahn, Yasmin Jafari, Emma Siegele Christie, Elizabeth Fonseca, Josh Crowley and Karina Castro Perezchica
- 2. Cross-Cultural Perspectives on Quantum Ethics: A Comparative Analysis of Western and Chinese Scholarly Discourses, Kylee Shiekh, Shawn Sun and Qin Zhu
- 3. *Mitigating Bias in Large Language Models Through Culturally-Relevant LLMs*, Malur Narayan, John Pasmore, Elton Sampaio, Vijay Raghavan, Sayan Maity, Gabriella Waters and Ayanna Howard
- 4. Ethical Issues in Autonomous Vehicle Programming- An Indian Perspective, Nedunchezhian Natarajan, Anbuchezian Ashokan, Subramanian Ramasamy and Arivazhagan Chinnusamy
- 5. Applying ethics in a complex piloting context, Kaisa Schmidt-Thomé, Anna Björk, Bhuvana Sekar and Aida Kalender

Session G3, Northwestern B – Workshop: Science Fiction for Ethical Design: A Framework for Engineering Education Facilitators: Sarah Papazoglakis and Theresa Hice-Fromille

Session G4, Arch – Workshop: From Schrödinger's Box to Global Fairness: Ethical Dilemmas in Quantum Computing Facilitators: Rebecca Mossop, Hagen Braun, Anton Maidl

Version 2.0, 4/25