Pre-Conference Workshop, 9:00 AM – 4:30 PM, WALC 3138
Norbert Wiener Symposium: Discussion of the Future of Work (Requires Invitation or Pre-Registration)

Registration, 5:00 – 7:00 PM, outside PMU East/West Faculty Lounge (2nd floor)

Welcome Reception, 5:30 – 6:30 PM, PMU East/West Faculty Lounge (2nd floor)
Host: Brent Jesiek, Purdue University (ETHICS-2023 Conference Chair)

Opening Plenary Session, 6:30 – 7:30 PM, PMU East/West Faculty Lounge (2nd floor)
Active Human Interface: Technology, Uncertainty, and Hope
Welcome and Speaker Introduction: Leah Jamieson, Purdue University (ETHICS-2023 General Chair)
Speaker: Debbie Chachra, Professor of Engineering, Olin College of Engineering

Friday May 19

Registration, 7:45 AM – 4:00 PM, WALC 1087 (Hospitality Room)

Breakfast, 7:45 – 8:30 AM, WALC 1087 (Hospitality Room)

Plenary Session, 8:30 – 10:00 AM, WALC 1018
Ethical and Legal Frameworks for Automation
Welcome: Brent Jesiek, Purdue University (ETHICS-2023 Conference Chair)
Speaker Introduction: Greg Adamson, University of Melbourne (SSIT Technical Activities Vice President)
Speaker: Iven Mareels, Executive Dean, Institute of Innovation, Science and Sustainability, Federation University Australia

Refreshment Break, 10 – 10:30 AM, WALC 1087 (Hospitality Room)

Parallel Sessions, 10:30 AM - Noon

Session A1, WALC 2124 – Panel: The Ethics of Weapons Technology Development (Conference Chair’s Special Session)
Moderator: Greg Adamson, School of Population and Global Health, University of Melbourne
Panelists:
John Emery, Assistant Professor, International and Area Studies, University of Oklahoma
Cameron Tracy, Research Scholar, Center for International Security and Cooperation (CISAC), Freeman Spogli Institute for International Studies, Stanford University
Aditi Verma, Assistant Professor, Nuclear Engineering and Radiological Sciences, University of Michigan

Session A2, WALC 2051 – Panel: The Arc of a Global Engineering Education
Panelists:
Laura MacDonald, Managing Director, Mortenson Center in Global Engineering & Resilience (Moderator)
Jessica Rush Leeker, Faculty Director of Undergraduate Education, Lockheed Martin Engineering Management Program
Brenton Kreiger, Bridge Program Education Manager, Engineers in Action
Erin Peiffer, Program Coordinator, Engineering For Change

Session A3, WALC 2088 - Papers: Exploring the Ethics of Utilizing Artificial Intelligence
Chair: Nael Bakarat, University of Texas at Tyler
1. Artificial Intelligence & Smart City Ethics: A Systematic Review, Connor Phillips and Junfeng Jiao
2. Artificial Moral Advisors: enhancing human ethical decision-making, Marco Tassella, Rémy Chaput and Mathieu Guillermin
4. AI Based Real-Time Privacy-Aware Camera Data Processing in Autonomous Vehicles, Shagun Bera and Kedar Khandeparkar
Session A4, WALC 2121 – Workshop: Exploring Mental Models of Ethics and Diversity, Equity, and Inclusion in Engineering
Facilitators: Isil Anakok, Graduate Research Assistant, Virginia Tech; Justin L. Hess, Assistant Professor of Engineering Education, Purdue University; Andrew Katz, Assistant Professor of Engineering Education, Virginia Tech; Sowmya Panuganti, Graduate Research Assistant, Purdue University

Lunch, 12:00 – 1:00 PM, WALC 1087 (Hospitality Room) – Sponsored by the National Institute for Engineering Ethics (NIEE)

Parallel Sessions, 1:00 – 2:30 PM

Session B1, WALC 2124 – Panel: Perspectives from Liberal Arts on the Practical Turn in AI Ethics
Moderator: Daniel Schiff, Assistant Professor of Public Policy, Purdue University
Panelists: Ekaterina Babintseva, Assistant Professor of History, Purdue University
James Messina, Assistant Professor of Philosophy, Purdue University
Kaylyn Jackson Schiff, Assistant Professor of Political Science, Purdue University
Sorin Adam Matei, Professor of Communication, Purdue University (Panel Organizer)

Session B2, WALC 2051 – Papers: Bridging the Social and the Ethical in Engineering
Chair: Andrew Taylor, Tennessee Valley Authority
1. Reifying Dominant Ideologies: Consequences of Decoupling Ethics and Equity in Engineering, Cindy Rottmann, Emily Moore, and Andrea Chan
2. Integrating Altruistic Values into the Engineering Research Center for Innovation and Strategic Transformation of Alkane Resources (CISTAR), Denise Driscoll and Maeve Drummond Oakes
3. Development of Social Impact Considerations during Engineering Internships, Malini Josiam, Sophia Vicente and Taylor Johnson

Session B3, WALC 2088 - Papers: Understanding and Mitigating Ethical Risks of Emerging Technologies
Chair: Grant Fore, IUPUI
1. ABCs: Differentiating Algorithmic Bias, Automation Bias, and Automation Complacency, Amanda Potasnik
2. What Is a Subliminal Technique? An Ethical Perspective on AI-Driven Influence, Juan Pablo Bermúdez, Rune Nyrop, Sebastian Deterding, Laura Moradbakhti, Céline Mougenot, Fangzhou You and Rafael A. Calvo
3. Value Sensitive Design meets Participatory Value Evaluation for autonomous systems in Defence, Christine Boshujzen-van Burken, Shannon Spruit, Lotte Fillerup and Niek Mouter
4. The Need for an Enhanced Process Methodology for Ethical Data Science Projects, Sucheta Lahiri and Jeff Saltz

Session B4, WALC 2121 – Workshop: Critical Design for Responsible Innovation
Facilitators: Heather Love, Assistant Professor of English Language and Literature, University of Waterloo; Alexi Orchard, University of Waterloo; Rebecca Sherlock, University of Waterloo

Break, 2:30 – 2:45 PM, WALC 1087 (Hospitality Room)

Parallel Sessions, 2:45 – 4:15 PM

Session C1, WALC 2124 – Panel: Careers in Technology Ethics
Moderator: Jason Borenstein, Georgia Institute of Technology
Panelists:
Chloe Autio, The Cantellus Group
Ed Carr, Siemens
Kelly Laas, Illinois Institute of Technology
Daniel Schiff, JP Morgan/Purdue University

Session C2, WALC 2051 – Panel: Socially Responsible Innovation for Climate Change Mitigation and Adaptation (Sponsored by IEEE Technical Activities Board Climate Change Program)
Panelists:
Wei-Jen Lee, University of Texas Arlington (Moderator)
Irene Samy, Nile University
Ravinder Dahlaya, Northeastern University
Session C3, WALC 2088 - Papers: Developing and Negotiating AI Guidelines and Governance
Chair: Elaine Englehardt, Utah Valley University
1. Exploring Approaches to Artificial Intelligence Governance: From Ethics to Policy, Dayoung Kim, Qin Zhu and Hoda Eldardiry
2. Design of an Ethical Framework for Artificial Intelligence in Cultural Heritage, Sofia Pansoni, Simona Tiribelli, Marina Paolanti, Emanuele Frontoni and Benedetta Giovanola
3. The potential for co-operatives to mitigate AI ethics catastrophes: perspectives from media analysis, David Marino and Ajung Moon

Session C4, WALC 2121 – Workshop: STS Postures as a Framework for Teaching Ethics Throughout the Engineering Curriculum
Facilitators: Nicole Mogul, Senior Lecturer, Electrical and Computer Engineering, University of Maryland; Tim Reedy, Lecturer, Science, Technology and Society, University of Maryland

Break, 4:15 – 5:15 PM

Poster Session, 5:15 – 6:30 PM, PMU North Ballroom (1st floor)

Dinner, 6:30 – 8:00 PM, PMU North Ballroom (1st floor)

Saturday May 20

Registration, 7:45 AM – 12:00 Noon, WALC 1087 (Hospitality Room)

Breakfast, 7:45 – 8:30 AM, WALC 1087 (Hospitality Room)

Plenary Session, 8:30 – 10:00 AM, WALC 1018
Thinking Like an Engineer: Twenty-Five Years Later
Chair: Justin Hess, Purdue University (ETHICS-2023 Co-Program Chair)
Author: Michael Davis, Senior Fellow at the Center for the Study of Ethics in the Professions and Emeritus Professor of Philosophy, Illinois Institute of Technology
Commentators:
Dayoung Kim, Assistant Professor of Engineering Education, Virginia Tech
Colleen Murphy, Roger and Stephany Joslin Professor of Law and Director, Women and Gender in Global Perspectives Program, University of Illinois Urbana-Champaign
Michael Pritchard, Professor Emeritus of Philosophy, Western Michigan University

Refreshment Break, 10 – 10:30 AM, WALC 1087 (Hospitality Room)

Session D1, WALC 2124 – Open Forum: Building a Technology Ethics Community
Facilitators: Thomas Creely, Director, Ethics and Emerging Military Technology Graduate Program, U.S. Naval War College; Heather Love, English Language and Literature, University of Waterloo; Jason Borenstein, School of Public Policy, Georgia Tech; Ketra Schmitt, Concordia University
Scribe: Marc Cheong, Computing and Information Systems, University of Melbourne

Session D2, WALC 2051 – Panel: The Role of Human Rights in the Global Helix for Technology Innovation and Justice
Moderators: Davis Chacon-Hurtado, University of Connecticut; Kelly Bohrer, University of Dayton; Shareen Hertel, University of Connecticut
Panelists:
Mic Johnson, Technology, Data, and Architecture at BNY Mellon (industry representative)
Theresa Harris, Program Director of the AAAS Center for Scientific Responsibility and Justice, American Association for the Advancement of Science
Anja Lanz, Design Engineer for Haakon Industries Ltd. Founder and CEO of Global Women in STEM
Molly Land, Catherine Roraback Professor of Law, University of Connecticut (academia representative)
Discussant: Dan Burkey, Associate Dean for Undergraduate Education and Diversity, University of Connecticut
Session D3, WALC 2088 - Papers: Implementing "Ethics by Design"
Chair: Cindy Rottmann, University of Toronto
1. **Auditing Practitioner Judgment for Algorithmic Fairness Implications**, Ike Obi and Colin M. Gray
2.  **A Quantitative Model for the Assessment of Ethics Risks in Information Technology**, Giulia Rafaiani, Giorgia Barchiesi, Ludovica Ilari, Marco Baldi and Benedetta Giovanola
3. **Ethical Biases in Machine Learning-based Filtering of Internet Communications**, Ludovica Ilari, Giulia Rafaiani, Marco Baldi and Benedetta Giovanola

Session D4, WALC 2121 – Workshop: Taking ‘day to day’ ethics seriously outside the academy: Experiences from STS and Communication
Facilitators: Megan Kenny Feister, California State University Channel Islands; Sean Michael Ferguson, California State University Channel Islands; Patrice Buzzanell, University of South Florida; Carla Zoltowski, Purdue University

Lunch on Your Own, 12:00 – 1:15 PM

Parallel Sessions, 1:15 – 2:45 PM

Session E1 (1:15 – 4:30 PM), WALC 2124 – INES Intersections: Connecting International Engineering Studies Scholars (INES Members Only)

Session E2, WALC 2051 – Panel: 4 + 1: The Impacts of Academia, Industry, Government and Civil Society on Sustainable Development (Sponsored by IEEE TechEthics Program)
Moderator: Mark A. Vasquez, IEEE TechEthics
Panelists:
Sara Belligoni, Rutgers University-New Brunswick, affiliated with the Megalopolitan Coastal Transformation Hub
Kelly Bohrer, Executive Director, Ethos Center, University of Dayton Britt Redd, City of Indianapolis Department of Metropolitan Development
Carson Reeling, Department of Agricultural Economics, Purdue University

Session E3, WALC 2088 - Papers: Identifying Social and Ethical Implications of Technological Innovations
Chair: Michael Loui, University of Illinois Urbana-Champaign
1. **Ethical issues of community-driven blockchain systems**, Signe Agerskov, Migle Laukyte and Roman Beck
3. **COVID Down Under: where did Australia’s pandemic apps go wrong?** Shaanan Cohney and Marc Cheong

Session E4, WALC 2121 – Tutorial: AI Safety, Governance, and Alignment
Facilitators: Sherri Lynn Conklin, Post Doctoral Fellow, Public Policy, Georgia Tech; Gaurav Sett, Graduate Student (MS in Computer Science), Georgia Tech

Break, 2:45 – 3:00 PM, WALC 1087 (Hospitality Room)

Parallel Sessions, 3:00 – 4:30 PM

Session F2, WALC 2051 – Panel: The Quintuple Helix: Promoting Innovation for Impactful Socio-Ecological Interactions (Sponsored by IEEE Standards Association)
Moderator: John Havens, IEEE Standards Association
Panelists:
Yu Yuan, IEEE SA President
Michael Davis, CEO of Merek Security Solutions
Gabrielle Aruta, Owner / Director, Filo Sofi Arts

Session F4, WALC 2121 – Workshop: I can’t teach ethics, I’m not an ethicist: Transforming STEM ethics education begins with engaging faculty as ethical subjects
Facilitators: Mary F. Price, Director of Teaching and Learning, The Forum on Education Abroad; Grant A. Fore, Research Associate, STEM Education Innovation and Research Institute, IUPUI; Justin Hess, Assistant Professor, Engineering Education, Purdue University; Elizabeth Sanders, Graduate Research Assistant, Engineering Education, Purdue University; Brandon Sorge, Associate Professor, School of Engineering & Technology, IUPUI; Martin Coleman, Associate Professor, Philosophy, IUPUI