



**Compact Conference Schedule V. 2.0**  
**Wilmeth Active Learning Center (WALC) and**  
**Purdue Memorial Union (PMU), Purdue University**

**Thursday May 18**

**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 (2<sup>nd</sup> floor)**

**Welcome Reception, 5:30 – 6:30 PM, PMU East/West Faculty Lounge (2<sup>nd</sup> floor)**

Host: Brent Jesiek, Purdue University (ETHICS-2023 Conference Chair)

**Opening Plenary Session, 6:30 – 7:30 PM, PMU East/West Faculty Lounge (2<sup>nd</sup> 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 Bakar, 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
3. *Speech Act Theory and Ethics of Speech Processing as Distinct Stages: the ethics of collecting, contextualizing and the releasing of (speech) data*, Jolly Thomas, Lalaram Arya, Mubarak Hussain and S. R. Mahadeva Prasanna
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 Potasznik
2. *What Is a Subliminal Technique? An Ethical Perspective on AI-Driven Influence*, Juan Pablo Bermúdez, Rune Nystrup, Sebastian Deterding, Laura Moradbakhti, Céline Mougnot, Fangzhou You and Rafael A. Calvo
3. *Value Sensitive Design meets Participatory Value Evaluation for autonomous systems in Defence*, Christine Boshuijzen-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 Dahiya, 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 (1<sup>st</sup> floor)**

**Dinner, 6:30 – 8:00 PM, PMU North Ballroom (1<sup>st</sup> 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)**

**Parallel Sessions, 10:30 AM - Noon**

**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 Rafeiani, Giorgia Barchiesi, Ludovica Ilari, Marco Baldi and Benedetta Giovanola
3. *Ethical Biases in Machine Learning-based Filtering of Internet Communications*, Ludovica Ilari, Giulia Rafeiani, 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**

<b>Parallel Sessions, 1:15 – 2:45 PM</b>
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### **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
2. *Social Implications of Technological Disruptions: A Transdisciplinary Cybernetics Science and Occupational Science Perspective*, Pedro H. Albuquerque and Sophie Albuquerque
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)**

<b>Parallel Sessions, 3:00 – 4:30 PM</b>
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### **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 Merck 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