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IEEE TechEthics™ Conference PROGRAM

13 October 2017

National Academy of Sciences Building
Washington, D.C.

#TechEthics

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Welcome to the inaugural IEEE TechEthics Conference.

Today's program features luminaries in technology, philosophy, ethics, and policy development exploring the ethical and societal implications of technology.

This highly interactive event is intended to provide ample opportunity for audience engagement, so be sure to share your questions and viewpoints throughout the day.

7:00-8:00 Registration & Badge Pick-up

7:00-8:00 Breakfast

Table Displays

8:00-8:15 Welcome & Opening Remarks

Kathy Land, Vice President-Elect, IEEE Technical Activities Board and Program Manager, US Department of Defense

Mark A. Vasquez, IEEE TechEthics™ Program Manager

8:15-9:00 KEYNOTE Accurately Estimating AI Progress is Difficult

Brought to you by the IEEE Robotics and Automation Society

Rodney Brooks, Chairman and CTO, Rethink Robotics

There will be tremendous uptake of AI and robotics over the next few decades, but perhaps most of that will be more mundane than many imagine.

9:00-10:00 PANEL The Social and Personal Impacts of AI

Brought to you by the IEEE Standards Association

Mary Ward-Callan (moderator), Managing Director, Technical Activities, IEEE

Sara Jordan, Assistant Professor, Center for Public Administration and Policy, Virginia Tech

Terah Lyons, Fellow, Mozilla

AI is driving big changes in the way we live, work and even think. It will affect all business sectors and all aspects of daily life. This panel will explore the social and personal impacts of AI as we embark on this journey.

10:00-10:15 Multimedia*

10:15-10:45 AM Break

Table displays

10:45-11:45pm PANEL Self-Driving Cars and Beyond: Societal Impacts of Autonomous Transportation Systems

Phil Ross (moderator), Senior Editor, IEEE Spectrum

Mary (Missy) Cummings, Director, Humans and Autonomy Laboratory, Duke University

Jason Borenstein, Director, Graduate Research Ethics Programs, School of Public Policy and Office of Graduate Studies, Georgia Institute of Technology

While cars tend to dominate the current conversation on autonomous transportation, planes, ships and other means have also become increasingly reliant on non-human interaction. This panel will explore the social implications of the broader autonomous vehicles landscape.

11:45-12:00 Multimedia*

12:00-1:15 Lunch

Table Displays

1:15-2:00 KEYNOTE Emerging Technologies for the Control of Human Brain Dynamics

Brought to you by the IEEE Engineering in Medicine & Biology Society

Danielle Bassett, Eduardo D. Glandt Faculty Fellow and Associate Professor, Department of Bioengineering, University of Pennsylvania

A review of recent developments at the intersection of neuroscience, control theory, and network science, their promise for enhancing cognition and for treating disorders of mental health, their current limitations, and the relevant ethical considerations.

2:00-3:00 PANEL Mind/Brain Research and AI Development: How Do They Inform Each Other?

Brought to you by the IEEE Brain Initiative

Stephanie Bird (moderator), co-Editor-in-Chief Science and Engineering Ethics

David Danks, L.L. Thurstone Professor of Philosophy and Psychology, and Head of the Department of Philosophy, Carnegie Mellon University

Eleonore Pauwels, Director of Biology Collectives, Science and Technology Innovation Program, Wilson Center

Michael Wolmetz, Senior Scientist, Intelligent Systems Center, Research and Exploratory Development Department, Johns Hopkins University Applied Physics Laboratory

Irina Rish, Research Staff Member, AI Foundations Group, IBM

This panel will explore the relationship between brain research and artificial intelligence advancements, including the social and ethical implications of building machines that think like humans.

3:00-3:15 Multimedia*

3:15-3:45 PM Break

Table Displays

3:45-4:45PM PANEL Influencing the Next Generation of Engineers via Ethics Education

Joe Herkert (moderator), Associate Professor Emeritus of Science, Technology and Society, and Visiting Scholar, Genetic Engineering and Society Center, North Carolina State University

Michael Hoffmann, Associate Professor, School of Public Policy, Director of the Philosophy Program, and Co-Director, Center for Ethics and Technology, Georgia Institute of Technology

Deborah Johnson, Anne Shirley Carter Olsson Professor of Applied Ethics, Emeritus, University of Virginia

Deirdre Mulligan, Associate Professor, School of Information, and Faculty Director, Berkeley Center for Law & Technology, UC Berkeley

This panel explores the opportunities and challenges regarding educating ethical engineers in the 21st century, given the rapid advance and growing complexity of technology.

4:45-5:15 FEATURED TALK and Multimedia*

Heather Knight, Assistant Professor, Computer Science and Robotics, Oregon State University

A review of the various aspects of the social and ethical implications of robotics, AI, and related technologies, as highlighted in the films showcased throughout today's program.

5:15-5:30 Closing Remarks

Mark A. Vasquez, IEEE TechEthics™ Program Manager

5:30-7:00 NETWORKING HOUR