IEEE ETHICS 2014 – Preliminary Program

Friday May 23

7:00 – 8:00  Breakfast  Location TBD

8:00 – 9:15  Opening Plenary  Grand Ballroom 4

Keynote Speaker: Dr. Gary L. Blank, IEEE-USA President 2014, “Engineering Ethics in the USA”

9:15 – 9:30  Break

9:30 – 10:30  Breakout Sessions

A1 Panel - The ethics of nuclear energy in the post-Fukushima Era
Grand Ballroom 6

Paolo Gardoni, Department of Civil and Environmental Engineering, University of Illinois, Urbana, IL,

Rafaela Hillerbrand, Department of Value, Technology and Innovation, Delft University of Technology, Delft, the Netherlands

Colleen Murphy, Department of Philosophy, University of Illinois, Urbana, IL

Behnam Taebi (session organizer), Department of Value, Technology and Innovation, Delft University of Technology, Delft, the Netherlands

A2 Panel - Ethical Challenges in Biomedical Engineering Research and Practice
Salon 9

Subrata Saha, Ph.D. – Chair, Director, Biomedical Engineering Program, School of Graduate Studies, Research Professor & Director of Musculoskeletal Research, Department of Orthopaedic Surgery & Rehabilitation Medicine, SUNY Downstate Medical Center, Brooklyn, NY, USA

Jan Sliwa, RISIS, Bern University of Applied Sciences – TI, Biel, Switzerland

A3 Panel - How do Practitioners Become Learned Professionals on Ethical Issues?
Grand Ballroom 5

William (Bill) Marcy, Murdough Center for Engineering Professionalism and Director of the National Institute for Engineering Ethics, Texas Tech University, Lubbock, TX, USA

Deborah Johnson, School of Engineering and Applied Science, University of Virginia, Charlottesville, VA, USA
Nael Barakat, Padnos College of Engineering and Computing and ASME Technology & Society Division Chair, Grand Valley State University. Grand Rapids, MI, USA

Steven Starrett (moderator), Department of Civil Engineering, Kansas State University, Manhattan, KS, USA

**A4 Panel - Responsible Innovation in Research: a Reflexive Governance to Scientific Development**

**Grand Ballroom 7**

Robert Gianni, Faculty of Informatics, Université de Namur. Namur, Belgium

Veikko Ikonen, Human-Driven Design and System Dynamics, VTT, Tampere, Finland

Philippe Goujon, Faculty of Informatics, Université de Namur, Namur, Belgium

John Pearson, Faculty of Informatics, Université de Namur, Namur, Belgium

**A5 Tutorial – Working With Ethicists: A Bestiary**

**Salon 8**

Kenneth D. Pimple, Ph.D., Poynter Center for the Study of Ethics and American Institutions, Indiana University, Bloomington, IN, USA

**10:30 – 11:00 Refreshment Break - Posters and Exhibits**

**Grand Ballroom 1,2,3**

**11:00-12:30 Breakout Sessions**

**B1 Special Paper Session – Ethical Challenges for Autonomous Robots**

**Grand Ballroom 6**

1. **Preserving Dignity in Patient Caregiver Relationships: Using Moral Emotions and Robots**

Ronald C. Arkin, School of Interactive Computing, Georgia Institute of Technology, Atlanta, GA, U.S.A. Matthias Scheutz and Linda Tickle-Degnen, Dept. of Computer Science and Occupational Therapy, Tufts University, Medford, MA, U.S.A.

2. **Mechanizing Modal Psychology**

Paul F. Bello, Ph.D., Human and Bioengineered Systems, Code 341, Office of Naval Research, Arlington, VA, USA

3. **Akratic Robots and the Computational Logic Thereof**

Selmer Bringsjord, Department of Computer Science, Department of Cognitive Science, Rensselaer AI & Reasoning Laboratory, Rensselaer Polytechnic Institute (RPI), Troy, NY, USA

Naveen Sundar G., Department of Computer Science, Department of Cognitive Science,
4. Moral Competence in Social Robots

Bertram F. Malle, Cognitive, Linguistic, and Psychological Sciences, Brown University, Providence, RI, USA
Matthias Scheutz, Department of Computer Science, Tufts University, Medford, MA, USA

5. “Think and Do the Right Thing” – A Plea for Morally Competent Autonomous Robots

Matthias Scheutz, Human-Robot Interaction Laboratory, Department of Computer Science, Tufts University, Medford, MA, USA
Bertram F. Malle, Cognitive, Linguistic, and Psychological Sciences, Brown University, Providence, RI, USA

B2 Paper Session – Ethics and Law
Salon 9

1. The Law and the Loop

Meg Leta Ambrose, J.D., Ph.D., Communication, Culture & Technology, Georgetown University, Washington, D.C., USA

2. Thou Shalt Not…A Look at the Ethics of Copying Software Code

Sarah J. Duda, Esq., Chicago Board Options Exchange, Chicago, IL, USA
Vickie Peters, PhDABD, Global Information Systems, DCGI, Ltd., Chicago, IL USA

3. Ethics, Law and Privacy: Disentangling Law from Ethics in Privacy Discourse

Gloria González Fuster and Serge Gutwirth, Law, Science, Technology and Society (LSTS), Vrije Universiteit Brussels (VUB), Brussels, Belgium

4. Forensic metrology: when measurement science meets ethics

Alessandro Ferrero, Fellow, IEEE, Department of Electronics, Information and Bioengineering, Politecnico di Milano, Milano, Italy
Veronica Scotti, Registered lawyer in Milano, Italy, Contract Professor at Politecnico di Milano, Milano, Italy

5. Ethics and Patents

Lisa M. Schoedel, McDonnell Boehnen Hulbert & Berghoff LLP, Chicago, IL, USA
B3 Paper Session – Ethics in Organizations
Grand Ballroom 5

1. Ethics and Military Engineering Operations
Carlos Bertha, Department of Philosophy, United States Air Force Academy, Colorado Springs, CO, USA

2. A Mathematical Technique for Complex Ethical Analysis Employing a Combination of the Analytical Hierarchy Process and Response Latency
Shane Yost, Richard Knox, Jarrod Thoma, Martin Denes, DeVry University - Students - College of Engineering & Information Sciences, Westminster, CO, USA
Steven Monroe, DeVry University – Professor, College of Engineering & Information Sciences, Westminster, CO, USA
Dr. Jerald L. Feinstein, DeVry University – Associate Dean, College of Engineering & Information Sciences, Westminster, CO, USA
Dr. Edward Polak, DeVry University – Electronic Engineering Technology Chair, College of Engineering & Information Sciences, Westminster, CO, USA

3. ‘The organization is what the leader is’: An ethical leadership framework for universities and research organizations
Avantika Singh, Nisha Rathore, Department of Management, Central University of Rajasthan, Ajmer, India

4. Engineering and Diversity: A Systems Engineering Perspective
Gordon Inggs, Department of Electrical and Electronic Engineering, Imperial College London, London, United Kingdom

5. Ethics and Peer Reviews: What Would the Phantom Inspector Reveal?
Karen Ulferts, Austin, TX, USA

B4 Paper Session - Research Ethics
Grand Ballroom 7

1. The Ethics of Wearable Cameras in the Wild
Victoria Shipp, Anya Skatova, Jesse Blum, and Michael Brown, Horizon Digital Economy Research, University of Nottingham, UK

2. Reproducibility, Correctness, and Buildability: the Three Principles for Ethical Public Dissemination of Computer Science and Engineering Research
Kristin Yvonne Rozier, Intelligent Systems Division, NASA Ames Research Center, Moffett Field, CA, USA
Eric W. D. Rozier, Electrical and Computer Engineering, University of Miami, Coral Gables, FL, USA
3. Ethics of scientific peer review: Are we judging or helping the review recipients?

Oluwabunmi Adewoyin, Department of Computer Science University of Saskatchewan, Saskatoon, Canada
Julita Vassileva, Department of Computer Science, University of Saskatchewan, Saskatoon, Canada

4. Plagiarism: It’s Not Just for Students

Marilyn A. Dyrud, Communication Department, Oregon Institute of Technology, Klamath Falls, OR, USA

5. Introducing Graduate and Undergraduate Students to Research and Professional Ethics at Columbia University

Irving P. Herman, Department of Applied Physics and Applied Mathematics, Columbia University, New York, NY, USA

B5 Paper Session – Philosophy, Ethics, Design & Development
Salon 8

1. Technology as Moral Proxy: Autonomy and Paternalism by Design

Jason Millar, Department of Philosophy, Queen’s University, Kingston, Canada

2. Towards a Philosophy of Engineering

Wade O. Troxell, Office of the Dean, College of Engineering, Colorado State University, Fort Collins, CO, USA
Graeme W. Troxell, Department of Philosophy, Colorado State University, Fort Collins, CO, USA

3. Embedding Philosophers in Engineering Research and Development Projects

Vivian Weil, Center for the Study of Ethics in the Professions, Illinois Institute of Technology, Chicago, IL, USA

4. Ethics in Engineering

Wade L. Robison, Department of Philosophy, Rochester Institute of Technology, Rochester, NY, USA

5. Developing Responsible Research and Innovation for Robotics

Neil McBride and Bernd Stahl, Centre for Computing and Social Responsibility, De Montfort University, Leicester, United Kingdom

B6 Workshop – Assessing Science and Engineering Ethics Outcomes: An Interactive Review of Tools
Salon 10

Jason Borenstein, School of Public Policy, Georgia Institute of Technology, Atlanta, GA, USA
12:30 – 1:30    Lunch     Location TBD

1:30-3:00    Breakout Sessions

C1 Paper Session - Ethics and Artificial Agents
Grand Ballroom 6

1. Principles for the Future Development of Artificial Agents

Deborah G. Johnson, Science, Technology and Society Program, University of Virginia, Charlottesville, VA, USA
Merel Noorman, Royal Netherlands Academy for Arts and Sciences, Amsterdam, The Netherlands

2. Acting vs. Being Moral: The Limits of Technological Moral Actors

Aaron M. Johnson, Electrical and Systems Engineering Department, University of Pennsylvania, Philadelphia, PA, USA
Sidney Axinn, Philosophy Department, University of South Florida, Tampa, FL, USA

3. Ethics and Design of User-Centered Multi-Agent Systems

Yves Demazeau, Centre National de la Recherche Scientifique, Grenoble, France

4. Ethics Within a Cognitive Robotics Society

Frederick Ackers and Darush Davani, Computer and Information Sciences, Towson University, Towson, MD, USA

5. AI Safety Engineering Through Introduction of Self-Reference Into Felicific Calculus via Artificial Pain and Pleasure

Andrew M. Majot, Computer Engineering and Computer Science, University of Louisville, Louisville, KY, USA
Roman V. Yampolskiy, Computer Engineering and Computer Science, University of Louisville, Louisville, KY, USA

C2 Paper Session – Ethics and Information & Communication Technology
Salon 9

1. Pseudonymity and Structuration: Identity, Interaction, and Structure in Online Communities

L. M. Stuart, M. J. Dark, Center for Education and Research in Information Assurance and Security (CERIAS), Purdue University, West Lafayette, IN, USA
2. Ethics and ICT: Beyond Design
Gerard van Oortmerssen, Tilburg Center for Cognition and Communication, Tilburg University, Tilburg, The Netherlands

3. Neither Pollyanna nor Chicken Little: Thoughts on the Ethics of Automation
C. Michael Holloway, NASA Langley Research Center, Hampton, VA, USA
John C. Knight, University of Virginia, Charlottesville, VA, USA
John A. McDermid, University of York, York, UK

4. Ethics behind Cyber Warfare: A study of Arab Citizens Awareness
Nedaa Baker Al Barghuthi, Department of Electrical and Computer Engineering, University of Sharjah
Sharjah, United Arab Emirates
Huwida Said, College of Technological Innovation, Zayed University, Dubai, United Arab Emirates

5. The ethical dilemma of implicit vs explicit data collection: Examining the factors that influence the voluntary disclosure of information by consumers to commercial organizations
Christos Themistocleous and Andrew Smith, Marketing Division, Business School, University of Nottingham, Nottingham, United Kingdom
Christian Wagner, Senior Member, IEEE, Horizon Digital Economy Research, Intelligent Modelling and Analysis Group, School of Computer Science, University of Nottingham, Nottingham, United Kingdom

C3 Paper Session – Codes of Ethics and Professional Responsibility
Grand Ballroom 5

1. Does “public” mean an engineer’s nation?
Michael Davis, Humanities Department, Illinois Institute of Technology, Chicago, IL, USA

2. Codes of Ethics Move Into the “Third Generation”
Susan Zinner, MSJ, MHA, JD, School of Public and Environmental Affairs, Indiana University Northwest, Gary, IN, USA

3. Towards a Global Code of Ethics for Engineers
Saif alZahir, Image Processing and Graphics Lab, Computer Science Department, UNBC, PG, British Columbia, Canada
Laura Kombo, Image Processing and Graphics Lab, Computer Science Department, UNBC, PG, British Columbia, Canada

4. Are Science, Technology, and Engineering Now the Most Important Subjects for Ethics?
Our need to respond
C4 Paper Session – Ethics and Educational Research
Grand Ballroom 7

1. Making Sense of Ethics in Engineering Education: A discursive examination of students’ perceptions of work and ethics on multidisciplinary project teams

Megan W. Kenny Feister, Brian Lamb School of Communication, Purdue University, West Lafayette, IN, USA
Carla B. Zoltowski, Engineering Projects In Community Service (EPICS), Purdue University, West Lafayette, IN, USA
Patrice M. Buzzanell, Brian Lamb School of Communication, Purdue University, West Lafayette, IN, USA
Qin Zhu, Engineering Education, Purdue University, West Lafayette, IN, USA
William C. Oakes, Engineering Projects In Community Service (EPICS) and Engineering Education, Purdue University, West Lafayette, IN, USA

2. Measuring Team Ethical Climate: Development of the TECS

J.L. May, A. Mead, J. K. Ellington, College of Psychology, Illinois Institute of Technology, Chicago, IL, USA

3. The Role of Motivation in Engineering Students’ Ethical Decisions

Diana Bairaktarova, Ph.D., School of Aerospace and Mechanical Engineering, College of Engineering, University of Oklahoma, Norman, OK, USA
Anna Woodcock, Ph.D., Department of Psychology, California State University, San Marcos, San Marcos, CA, USA

4. Cross-cultural and cross-national impact of ethics education on engineering students

Ruth I. Murrugarra, Department of Engineering and Science, Universidad Adolfo Ibañez Viña del Mar, Chile
William A. Wallace, Department of Industrial and Systems Engineering, Rensselaer Polytechnic Institute, Troy, NY, USA

5. Ethical Behavior Mapping Rubric for Ethics Education in Engineering

Kushal Abhyankar, Department of Biomedical, Industrial and Human Factors Engineering, Wright State University, Dayton, OH, USA
Subhashini Ganapathy, Ph.D., IEEE Senior Member, Department of Biomedical, Industrial and Human Factors Engineering, Wright State University, Dayton, OH, USA
Phani Kidambi, Ph.D., Department of Biomedical, Industrial and Human Factors Engineering, Wright State University Dayton, OH, USA
C6 Workshop - Integrating Professional Issues into the Technical Curriculum: Teaching Students about the Challenge of Professionalism and Ethics in an Increasingly Automated World Living with Sophisticated Machines
Salon 10

Donald Gotterbarn, Professor Emeritus, East Tennessee State University, Johnson City, TN, USA
Keith W. Miller, Orthwein Professor for Lifelong Learning in the Sciences, University of Missouri – St. Louis, St. Louis, MO, USA

3:00 – 3:30 Refreshment Break - Posters and Exhibits
Grand Ballroom 1,2,3

3:30 – 5:00 Breakout Sessions

D1 Paper Session - Privacy and Security
Grand Ballroom 6

1. App Stores for the Brain: Privacy & Security in Brain-Computer Interfaces
Tamara Bonaci1, Department of Electrical Engineering, University of Washington, Seattle, WA, USA
Ryan Calo, School of Law, University of Washington, Seattle, WA, USA
Howard Jay Chizeck, Department of Electrical Engineering, University of Washington, Seattle, WA, USA

2. An Ethical Examination of the Internet Census 2012 Dataset: A Menlo Report Case Study
David Dittrich, University of Washington, Seattle, Washington, USA
Katherine Carpenter

3. Ethics and Privacy in National Security and Critical Infrastructure Protection
Jennifer Betts and Sakir Sezer, School of EEECS, Queens University Belfast, Belfast, Northern Ireland

4. Proposed Social and Technological Solutions to Issues of Data Privacy in Personal Genomics
Dov Greenbaum, Sanford T. Colb & Co. Intellectual Property Law, Marmorek, Rehovot, Israel
Arif Harmanci and Mark Gerstein, Program in Computational Biology and Bioinformatics and the Department of Molecular Biophysics and Biochemistry, Yale University, New Haven, CT, USA.

5. The Ethics of Coexistence: Can I Learn to Stop Worrying and Love the Logic Bomb?
D2 Paper Session – Ethics and Emerging Technologies
Salon 9

1. Bound To Be ‘Normal’: Assistive technology, fair opportunity, and athletic excellence
D.A. Baker, Consortium for Science, Policy, and Outcomes, Arizona State University, Tempe, AZ, USA

2. Informed Consent in the Psychiatric Application of Deep Brain Stimulation Technology
Andrew Koivuniemi, Medical Scientist Training Program, Indiana University School of Medicine, Indianapolis, IN, USA

3. Towards Ethical Research Practice: Anticipating Social Consequences of Rehabilitation Robots
Hee-Tae Jung, School of Computer Science, University of Massachusetts Amherst, Amherst, MA, USA
Danbi Yoo, Department of Communication, University of Massachusetts Amherst, Amherst, MA, USA

4. Augmented Reality – Towards an Ethical Fantasy?
Heimo, Olli I., Technology Research Center and Department of Management, University of Turku, Finland
Kimppa, Kai K. Department of Management, University of Turku, Finland
Helle, Seppo, Technology Research Center, University of Turku, Finland
Korkalainen, Timo, Technology Research Center, University of Turku, Finland
Lehtonen, Teijo, Technology Research Center, University of Turku, Finland

5. Ethical Issues with use of Drone Aircraft
Richard L. Wilson, Philosophy/Engineering Management, University of Maryland at Baltimore County, Baltimore, MD, USA

D3 Paper Session – Ethics and Development
Grand Ballroom 5

1. Ethical education of an engineer with responsibility for a sustainable world
Thelma Virgínia Rodrigues, Pontifical Catholic University of Minas Gerais, Belo Horizonte, Brasil
André Luis Gonçalves, Plínio Soares Paolinelli Maciel and Pedro Augusto Rodrigues de Paiva

2. Bringing Responsible Research into Engineering Ethics: Responsible Research in Appropriate Technology
William J. Frey, College of Business Administration, University of Puerto Rico at Mayagüez
Cristina Rivera-Vélez, College of Business Administration, University of Puerto Rico at Mayagüez

3. University Cooperation as a Development Tool In Poor Countries
Suresh Sharma, Bhola Thapa, Kathmandu University, Dhulikel, Nepal
Inge Johansen, Ole Gunnar Dahlhaug, NTNU, Trondheim, Norway
Petter Støa, SINTEF Energy Research, Trondheim, Norway

4. The ethics of curriculum development: Engineers and technicians in a context of development
Chris Winberg, Penelope Engel-Hills, Cape Peninsula University of Technology, Cape Town, South Africa
Arie Rip, University of Twente, Enschede, Netherlands
Simon Winberg, University of Cape Town, Cape Town, South Africa

D4 Paper Session - Teaching Ethics: Courses and Methods
Grand Ballroom 7

1. Mind the Gap: Using Lessons Learned from Practicing Engineers to Teach Engineering Ethics to Undergraduates
Christine G. Nicometo, M.S., Engineering Professional Development, College of Engineering, University of Wisconsin-Madison, Madison, WI, USA
Traci Nathans-Kelly, Ph.D., Engineering Communications, College of Engineering, Cornell University, Ithaca, NY, USA
Bart Skarzynski, M.F.A., Engineering Professional Development, College of Engineering, University of Wisconsin – Madison, Madison, WI, USA

2. A Multi-Disciplinary, Multi-Institutional Approach to Teaching Ethical, Social, Health, Safety, and Environmental Issues in Nanotechnology
J. Craig Hanks, Department of Philosophy, Texas State University, San Marcos, TX USA
Jitendra Tate, Ingram School of Engineering, Texas State University, San Marcos, TX, USA
Dominick Fazarro, Human Resource Development and Technology, The University of Texas at Tyler, Tyler, TX, USA
Walt Trybula, Ingram School of Engineering, Texas State University, San Marcos, TX, USA
Robert McLean, Department of Biology, Texas State University, San Marcos, TX, USA
Satyajit Dutta, Ingram School of Engineering, Texas State University, San Marcos, TX, USA
Fritz Alhoff, Department of Philosophy, Western Michigan University, Kalamazoo, MI, USA

3. Ethics and the Allocation of Risk in Engineering Design
Dr. David L. Bodde, International Center for Automotive Research, Clemson University, Greenville, SC, USA
4. Ethics as Philosophical History for Engineers
   Daniel J. Biezad, Senior Member, IEEE

5. A Phenomenological Approach to Teaching Engineering Ethics
   Valorie Troesch, J.D., Department of Humanities, Michigan Technological University, Houghton, MI, U.S.A.

**D6 Workshop - Engineers: Excellent by Design**
**Salon 10**

Bill Carrier, Vice President Engineering and Sr. Chief Engineer Structures & Mechanical Systems, Boeing Defense, Space & Security

Paul Charlston, Ethics Advisor, Boeing Defense, Space & Security, Ethics and Business Conduct, Office of Internal Governance

6:00 – 9:00   Reception   Location TBD

Saturday, May 24

7:00 – 8:00   Breakfast   Location TBD

8:00 – 9:15   Plenary Session

Speakers:

John J. Tracy, Chief Technology Officer and Senior Vice President of Engineering, Operations & Technology, The Boeing Company

Ellen Martin, Vice President, Ethics and Business Conduct, Office of Internal Governance, The Boeing Company

9:15 – 9:45   Refreshment Break - Posters and Exhibits
Grand Ballroom 1,2,3

9:45 – 11:45   Breakout Sessions

**E1 Panel – Ethics and Pervasive ICT**
**Grand Ballroom 6**

Kenneth D. Pimple, Ph.D., Poynter Center for the Study of Ethics and American Institutions, Indiana University Bloomington, Bloomington, Indiana, IN, USA

Cynthia Jones, Ph.D., Department of History & Philosophy, University of Texas-Pan American, Edinburg, TX, USA
Keith W. Miller, Ph.D., Department of Secondary and K-12 Education, University of Missouri – St. Louis, St. Louis, MO, USA

Donald R. Searing, Ph.D., Syncere Systems Lawrenceville, GA, USA

Katherine D. Seelman, Ph.D., Rehabilitation Science and Technology, University of Pittsburgh, Pittsburgh, PA, USA

Katie Shilton, Ph.D., College of Information Studies, University of Maryland, College Park, MD, USA

E2 Panel - Ethics in modern universities of technology: Challenges of the 21st century
Salon 9

Penelope Engel-Hills, Faculty of Health Sciences, Cape Peninsula University of Technology, Cape Town, South Africa

Rafaela Hillerbrand, Department of Value, Technology and Innovation, Delft University of Technology, Delft, the Netherlands

Arie Rip, School of Management and Governance, University of Twente, Twente, the Netherlands

Mary Sunderland, Center for Science, Technology, Medicine, and Society, University of California, Berkeley, Berkeley, CA, USA

Behnam Taebi (session organizer), Department of Value, Technology and Innovation, Delft University of Technology, Delft, the Netherlands

Claudia Werker, Department of Value, Technology and Innovation, Delft University of Technology, Delft, the Netherlands

Chris Wineberg, Fundani Centre for Higher Education Development Cape, Peninsula University of Technology, Cape Town, South Africa

E3 Panel - Ethics and Emerging Technology: Ethical Concerns From a Cognitive, Media & Technology Focused Psychology Perspective Concerning Augmented Reality, Privacy, and Singularity
Grand Ballroom 5

Shane Pase, MA, MSW, Department of Media Psychology, Fielding Graduate University, Santa Barbara, CA, USA

Garry Hare, Ph.D., Department of Media Psychology, Fielding Graduate University, Santa Barbara, CA, USA

Jerri Lynn Hogg, Ph.D., Department of Media Psychology, Fielding Graduate University, Santa Barbara, CA, USA
E4 Paper Session – Teaching Ethics: Unique Contexts and Persistent Challenges
Grand Ballroom 7

1. Lessons Learned From a Year in the Trenches: Teaching Engineering Ethics for P.E. Licensure Requirements
Laura Grossenbacher, Engineering Professional Development Dept., Univ. of Wisconsin, Madison, WI, USA
Thomas D. McGlamery, Engineering Professional Development Dept., Univ. of Wisconsin, Madison, WI, USA

2. Ethics and Competitive Advantage in a Fast-Paced Industry
Pete Hylton, Purdue School of Engineering & Technology, Indiana University Purdue University Indianapolis, Indianapolis, Indiana, USA

3. Tribes, Boundaries, and Intellectual Silos: Science, Technology, and Engineering Ethics Education in the Departmentalized World of Academia
David K. McGraw, Department of Integrated Science and Technology, James Madison University Harrisonburg, VA, USA
Amanda G. Biesecker, Department of Integrated Science and Technology, James Madison University, Harrisonburg, VA, USA

4. The Technology of Cheating
Dr. Randy Kelley, University of Pittsburgh at Johnstown, Johnstown, Pennsylvania, USA
Dr. Brandon Dooley, Samsung Corp., Houston, Texas, USA

5. Why Students Plagiarize in Organic Chemistry Laboratory Course?--- A Case at Hebei University of Technology in China
Yu-ying Yang, School of Chemical Engineering and Technology, Hebei University of Technology, Tianjin, P.R. China

Simon G. M. Koo, Department of Computer Engineering, Santa Clara University, Santa Clara, CA, U.S.A.
John Huen, Founder & CEO, Let’s Code (Hong Kong), Tsuen Wan, Hong Kong
1. **Sustainability Assessments, Engineering and the Precautionary Principle: The Case of a Transmission Line**

Tom Cooper, Faculty of Business Administration, Memorial University, St. John’s, NL, Canada
Amy Hsiao, Faculty of Engineering and Applied Sciences, Memorial University, St. John’s, NL, Canada

2. **The Ethics of Energy Transitions**

Clark Miller, Consortium for Science, Policy & Outcomes, Arizona State University, Tempe, AZ, USA

3. **Engineering for Problems of Excess**

Lav R. Varshney, Department of Electrical and Computer Engineering, Coordinated Science Laboratory, University of Illinois at Urbana-Champaign, Urbana, IL, USA

4. **Development of Socially Sustainable Traffic-Control Principles for Self-Driving Vehicles: The Ethics of Anthropocentric Design**

Miloš N. Mladenović, Montasir Abbas, PhD, Department of Civil and Environmental Engineering, Virginia Tech, Blacksburg, VA, U.S.A.
Tristram McPherson, PhD, Department of Philosophy, Virginia Tech, Blacksburg, VA, U.S.A.

5. **Small Modular Reactors: The Future of Nuclear Energy?**

Jennifer Richter, Consortium for Science, Policy & Outcomes and School of Social Transformation, Arizona State University, Tempe, AZ, USA

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**E6 Workshop - Ancient Raja Yoga - The Science of Reviving Ethical Values**

Salon 8

R. Radhakrishna Pillai, Indian Institute of Management Kozhikode, India

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**Poster Session**

**Grand Ballroom 1,2,3**

(Posters will be available throughout the conference; attendees are invited to visit with the authors during the refreshment breaks.)

4. **Ethics of Scientific Publication: (Mal)-Practices and Consequentialism**

Anupam Chattopadhyay, MPSoC Architectures Research Group, RWTH Aachen, Germany

23. **Value Justification and Conscience in Professional Activities: A Case Study about Scientists, Technologists and Engineers**
27. Global Ethics and Virtual Worlds: Ensuring Functional Integrity in Transnational Research Studies

Dr. John Murray, Computer Science Laboratory, SRI International, Menlo Park, CA, USA
Prof. Joshua A. T. Fairfield, School of Law, Washington and Lee University, Lexington, VA, USA

79. Case Study: Engineer Discovers Problem but Supervisor Wants to Ignore

Steven K. Starrett, Ph.D., P.E., D.WRE, F.ASCE, F.EWRI, Department of Civil Engineering, Kansas State University, Manhattan, KS, USA
Amy Lara, Ph.D., Department of Philosophy, Kansas State University Manhattan, KS, USA

81. Ethical challenges in reducing global greenhouse gas emission

Inge Johansen, Norwegian University of Science and Technology, Trondheim, Norway
Petter Støa, SINTEF Energy Research,Trondheim, Norway

84. Piracy in the Digital Age: Is Ethical Awareness Turning into Action?

Rekha.A.G, Doctoral Student (IT & Systems), Indian Institute of Management, Kozhikode, India
Dr. R. Radhakrishna Pillai, IT & Systems Area, Indian Institute of Management, Kozhikode, India

87. Ethical Responsibilities: The Smart Card Engineer

Nsima Sylvanus Udoh and Opeoluwa Tosin Eluwole,Transaction Security Department, Underwriters Laboratories, Basingstoke, United Kingdom
Abidemi Olufisayo Ologunde, Department of Electrical Engineering, University of South Florida, Tampa, FL, USA

110. Investigation of Ethics in Engineering Design

Abidemi Olufisayo Ologunde, Department of Electrical Engineering, University of South Florida, Tampa, FL, USA
Opeoluwa Tosin Eluwole and Nsima Sylvanus Udoh, Transaction Security Department, Underwriters Laboratories, Basingstoke, United Kingdom

126. Ethics between the lines (of code)

Jan Sliwa, RISIS, Bern University of Applied Sciences – TI, Biel, Switzerland

139. Interaction between Ethics and Technology
167. Ethics and Nanotechnology

Dr. Ahmed S. Khan, College of Engineering & Information Sciences, DeVry University, Addison, IL, USA

175. Ethics and the Official Reports about the Destruction of the World Trade Center Twin Towers (WTC1 and WTC2) on 9/11: A Case Study

John D. Wyndham, PhD (Physics), Scientists for 9/11 Truth, Peterborough, NH, USA
Wayne H. Coste, PE, IEEE and Michael R. Smith, IEEE, Architects & Engineers for 9/11 Truth, Berkeley, CA

194. An Ethical Framework for Evaluating Construction Materials

Alexandra Sibole, School of Engineering and Markkula Center for Applied Ethics, Santa Clara University, Santa Clara, CA, USA