

AI and Robotics Symposium

Sharing thought leadership shaping the future of work

Friday, November 1, 2019



I. AI and Ethics

Robotics, Artificial Intelligence (AI), and Machine Learning (ML) will have broad impact on our society. It is unlikely that robots will rise up in a Robot Apocalypse. However, might a robot faithfully attempting to follow human-given instructions, without ethics or common sense, unintentionally harm individuals or even humanity? The expected proliferation of advanced autonomous robots raises a number of practical questions. In this panel, you'll hear from leading experts in AI, robotics, and law on subjects such as:

- How considerations of equal opportunity (such as for Title VI and Title IX) apply to robotics and the development of its workforce.
- Will robots take over a substantial fraction of available jobs, putting many people out of work?
- We are already taking certain steps, but are ongoing policy, law, and education efforts well-conceived or even appropriate?
- Who needs to take action going forward? Technologists? Policy-makers? Industry? Educators? International organizations?
- Beyond jobs, how challenges in safety, privacy, and human/robot rights can be reconciled.

Moderator:

Robert Huschka, Director of Education Strategies, Association for Advancing Automation

Panelists:

Ella Atkins, Professor, Aerospace Engineering, University of Michigan

Chad Jenkins, Associate Professor, Computer Science and Engineering / Robotics Institute, University of Michigan

Stephen Wu, Shareholder, Silicon Valley Law Group

II. Cobots at Work

Collaborative robots, generally described as robots that work side by side with people with no barriers separating them, is one of the hottest trends in robotics. Small and medium sized companies who never considered robots have been intrigued by the promise of collaborative robots as easy to use, safe, and productive tools that don't require large amount of floor space or internal resources and can be up and running quickly. During this panel, you'll hear from leading suppliers of collaborative robots as well as top researchers who will discuss key issues such as:

- 'Perceived safety' and challenges with unguarded machines.
- Expectation Management: how humanizing robots can lead to unexpected problems.
- Ensuring automation is a benefit for society as a whole.
- Why collaborative robots have attracted so much interest from potential users.
- Important considerations on how to select the right type of robot.
- Addressing safety concerns when using collaborative robots.
- Preparing employees for the introduction of collaborative robots.

Moderator:

Chase Perkins, Core Member, Data Analytics and Robotics, AI & Automation Practice Groups, Littler

Panelists:

Steve Green, President, KUKA Robotics USA

Lionel Robert, Associate Professor of Information, School of Information, University of Michigan

Stuart Shepherd, Chairperson, Association for Advancing Automation and Regional Director of Sales, Americas, Universal Robots



III. Preparing Your Workforce: Future Worker Roles, Education, and Skill Requirements

With the technologically-driven redefinition of the workforce, workplace, and work itself, we are living in a time that necessitates constant relearning and reskilling. This panel will address practical steps that are required now for successfully preparing your workforce for the implementation of robotics, including collaborative robotics, augmented and virtual reality, and various forms of AI. With nearly half of all jobs changing through rapid automation, having businesses understand how to integrate robotics and AI into the workplace (which requires upgraded skills and new roles), is crucial for success.

To stay competitive and in step with advancing technologies, this session will address:

- How to analyze worker skill sets and future skills gaps, as well as identify opportunities for mass on-line learning or augmented and virtual reality training to help bridge that gap, and customize the retraining experience to fit learners' needs.
- How to develop long-term strategic plans so employee questions/concerns can be met with transparent dialogue.
- Success stories of how companies have implemented comprehensive retraining programs and repositioning strategies while increasing productivity to decrease labor costs.
- Examples and guidelines for implementing improved and targeted workforce training and education so that employers, workers, and the economy as a whole can withstand and overcome technologically-induced unemployment.
- The most likely legal issues and compliance solutions associated with 21st century on-the-job training programs to embrace automation while minimizing risk.
- How to develop best practices to help employers and industries implement or support training programs that will provide workers with needed skills.
- How to create company cultures of agility that will facilitate reskilling while improving employee productivity and morale.

Moderator:

Jaclyn Giffen, Core Member, Robotics, AI & Automation Practice Group, Littler

Panelists:

Natalie Pierce, Co-Chair, Robotics, AI & Automation Practice Group, Littler

Keith Rayle, Strategist, FortiGuard Labs

Jessica Robinson, Executive Director, Michigan Mobility Institute

Heather Schroder, Director, Senior Legal Counsel, Robert Bosch LLC

IV. Expert Tips on Successfully Automating

As companies in all industries begin to assess whether robotics and automation can help them become stronger global competitors, it becomes more important than ever that they have a clear understanding up-front on how to successfully automate. This panel, made up of leading robotics industry veterans, will focus on:

- How robotics is changing the global competitive landscape.
- How to select the right applications to automate.
- How to determine whether to tackle the project with in-house resources or work with a system integrator.
- Key steps to take up-front and common pitfalls to avoid.
- How to prepare your workforce for the implementation of robotics and automation.
- How to make sure that safety is a priority from day one.
- How to find resources that can assist you in successfully automating.
- How to make sure your workforce has the skills to succeed in an increasingly automated world.

Moderator:

Jeff Burnstein, President, Association for Advancing Automation

Panelists:

Mike Cicco, President & CEO, Fanuc America Corporation

Dave Gravel, Robotics Technical Expert, Ford Motor Company Advanced Manufacturing

Mike Jacobs, President & Founder, Applied Manufacturing Technologies