

6TH ANNUAL EVENT

robotics alley

CONFERENCE & EXPO

February 28 - March 1, 2017

The Depot, Minneapolis

Robots in the Real World

Learn how automation will impact entertainment, healthcare, retail and more — and why your business should care.

► Economic Engine

Hear about programs that are preparing the workforce of tomorrow and ways the Midwest can use its unique resources to drive innovation.

► Legislating the Future

Join us for our first Virtual Policy Forum to hear how legislators are setting the stage for the next generation of technology.

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Don Craighead
Power/mation Co-Founder

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Welcome!

Thank you for participating in the Sixth Annual Robotics Alley Conference & Expo. We are glad you're here!

The Robotics Alley Conference & Expo in Minneapolis began in 2011 as an industry-led initiative to spotlight the rapid growth of robotics and automation in the Midwest and globally. It has brought together businesses, researchers, engineers, investors and others to help catalyze the fast-emerging robotics industry in Minnesota and the region.

Although the conference includes deep-dive breakout sessions via a track-based curriculum, the overall conference experience includes a multi-disciplinary approach spanning across industries (e.g. Retail, Agriculture, Defense, Entertainment, etc.) & trends (e.g. autonomous vehicles, artificial intelligence, implications of automation on public policy, etc.). These rich experiences are delivered via general sessions, industry leading keynote speakers, panel sessions, ample networking forums, and a hands-on exposition area.

One of the benefits of producing Robotics Alley is getting to work with the innovative people and companies who help make this event possible. We recently brought some of them together for a one-hour television program on Robotics Alley, and their thoughts really captured the core mission of this event.

"Robotics Alley is the kind of place where we notice innovation, we recognize innovation, and we build innovation by bringing people together from around the world. That was the idea when we started talking about bringing the World's Fair here." — Mark Ritchie, Former Minnesota Secretary of State, Current CEO of World's Fair Bid Committee 2023

"I think the Twin Cities, Minneapolis, and the Minnesota area is a really awesome, diverse ecosystem. We have these verticals, kind of like little flowers on the prairie. We've got medical tech, we've got healthcare, we've got agri-tech and food science. We have retail, we have manufacturing, and we have really strong players in all of those verticals, and we don't compete [with each other] very much.

"And I think what we have for the future of Minnesota and for the future of the U.S. as well is being able to cross-pollinate horizontally. And this is an environment where everyone can come together because all of these industries have got robotics as a core interest." — Elwin Loomis, Senior Director, Store of the Future, Target Corporation and 2017 Robotics Alley Keynote Speaker

Thank you to our advisors, sponsors, speakers and attendees for making this possible. Now have a great event!



Eileen M. Manning



Eileen Manning
Executive Producer,
Robotics Alley
Conference & Expo

N. Mohan



Niles Mohan
2017 Chair, Robotics
Alley Conference & Expo

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Minnesota



Paul Cobian
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Don Craighead
DHC Enterprises,
Incorporated



Andrew Drenner
ReconRobotics



Leili Fatehi
Apparatus



Todd Fronek
Larkin Hoffman



Sean Green
Adventure Santa



Ryan Gubrud
Altron Inc.



Paul Gunderson
Dakota Precision
Ag Center



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Kimberly Johnson
Century College



Mark Lawrence
FIRST Robotics



Matthew Leaf
Hennepin
Technical College



Jim Merritt
Altron Inc.



Cheryl Moeller
High Tech Kids



Lynne Osterman
Nanovox



Wes Rhodes
IBM Analytics



Mark Ritchie
Expo 2023



Christopher Scorzelli
Origin, Inc.



Scott Simenson
Century College



Nick Strauss
Graco Inc.



Aaron Sykes
MAVMeetup



Eric Taipale
Sentera



Jeff Thorstad
Hennepin
Technical College



Scot Wesolaski
Z Aerospace



Mathew Woodlee
U.S. Commercial
Service Minnesota

COMMITTEES

Drone Fly Zone

Aaron Sykes
MAVMeetup

Lifetime Achievement Award Dinner

Andrew Drenner
ReconRobotics

Bonnie Holub
Cognizant

March of the Robots & STEM Showcase

Cheryl Moeller
High Tech Kids

Mark Lawrence
FIRST Robotics

Virtual Policy Forum

Leili Fatehi
Apparatus

Laura Monn Gingsburg
Apparatus

Student Scholarships

Paul Cobian
3M

Anne Imsdahl
Boston Scientific

Durga Panda
Century College Foundation

Tracks

Rob Beachy
Axiom Business Concepts

Scott Simenson
Century College

Chris Scorzelli
Origin, Inc.

Thank you!










► The 2017 Robotics Alley Conference & Expo would not have been possible without the efforts, commitment and expertise of all who were involved. Thank you.

FULL CONFERENCE AGENDA

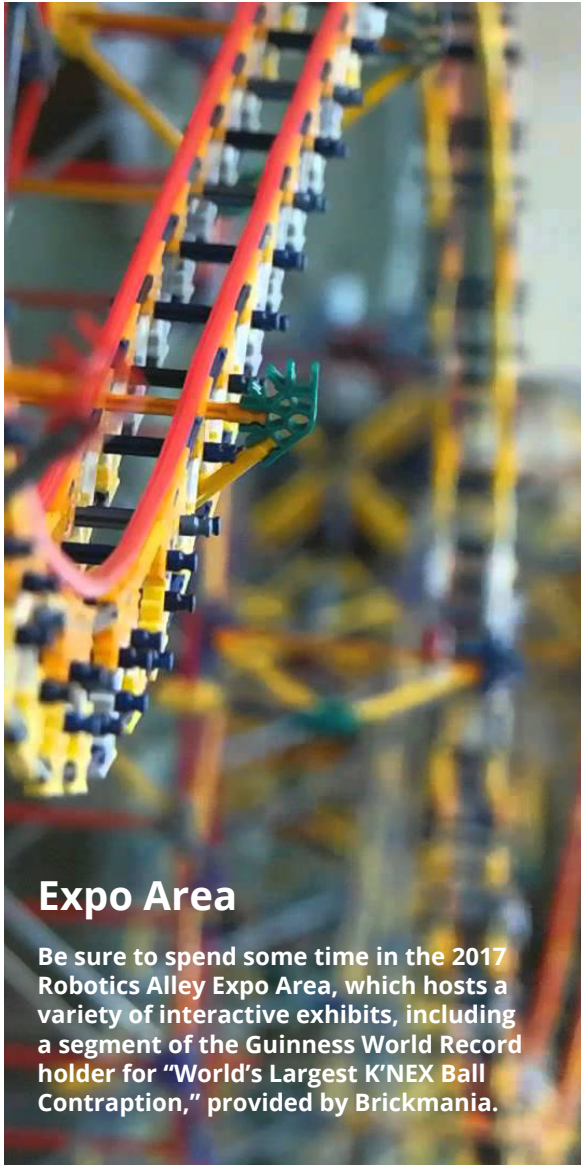
Day 1, February 28

| | | | |
|---------------------|--|--|--|
| 7:15 - 8:00 AM | Registration Opens | | |
| 8:00 - 8:30 AM | Welcome Remarks Eileen Manning, Robotics Alley Conference & Expo; Nilesh Mohan, Target Corporation; Amy Klobuchar, U.S. Senate (via video) | | |
| 8:30 - 9:15 AM |  KEYNOTE: Automatic Ethics - Jacob Ward, Television Correspondent; Former Editor-in-Chief, Popular Science magazine | | |
| 9:15 - 10:00 AM |  KEYNOTE: The Art of the Possible — Building an AI Application - Dan Mallin, Equals 3, LLC | | |
| 10:00 - 10:45 AM | BREAK IN EXPO AREA | | |
| 10:45 AM - 12:00 PM |  Track 1: Changing the Way We Live and Work <i>Room: Hiawatha 1</i> |  Track 2: Healthcare Robotics <i>Room: Hiawatha 3</i> |  Track 3: Advanced Manufacturing <i>Room: Hiawatha 2</i> |
| | PANEL: Why Cybersecurity Should be a Top Priority for Robotics IoT Steven Goldsmith, Michigan Technological University; Arun Perinkolam, Deloitte; James Ryan, Litmus Logic; Nina Tucker, Twin Oaks Computing | Active Material Technology for Wearable Systems Brad Holschuh, University of Minnesota | PANEL: The Future of Additive and Digital Manufacturing Larry Doerr, Rev Materials; Jason Huebscher, Gillette Children's Specialty Healthcare; Paul Rudin, Symmetry Solutions; Scott Simenson, Century College |
| 12:00 - 1:00 PM | LUNCH BREAK - Cash buffet available in Expo Area | | |
| 1:00 - 2:30 PM |  Virtual Policy Forum Legislator Panel - Brought to you by Apparatus Facilitator: Margaret Anderson Kelliher, MHTA Panelists: Rep. Tony Albright, MN House of Representatives; Sen. Kari Dziedzic, MN State Senate; Rep. Paul Thissen, MN House of Representatives | | |
| 2:30 - 3:00 PM | BREAK IN EXPO AREA | | |
| 2:30 - 6:30 PM | STEM Showcase | | |
| 3:00 - 3:30 PM |  KEYNOTE: Creating a Community of Disruptors - Elwin Loomis, Target Corporation | | |
| 3:30 - 4:45 PM | Invest in Innovation - Judges: Todd Fronek, Larkin Hoffman; Tommy Kenville, Valley Angels; David Russick, Gopher Angels, LLC | | |
| 4:45 - 5:00 PM | March of the Robots - Tyler Mason, AirVüz News | | |
| 5:00 - 6:30 PM | Networking Reception | | |
| 6:30 - 9:00 PM | Lifetime Achievement Award Dinner - Honoring Don Craighead | | |

Day 2, March 1

| | | | |
|---------------------|---|--|--|
| 7:15 - 8:00 AM | Registration Opens | | |
| 8:00 - 8:30 AM | Welcome Remarks Eileen Manning, Robotics Alley Conference & Expo; Nilesh Mohan, Target Corporation | | |
| 8:30 - 9:15 AM |  KEYNOTE: Why You Are In the "Robot Experiences" Business Martin Buehler, Walt Disney Imagineering | | |
| 9:15 - 10:00 AM |  KEYNOTE: Mind-Control of a Robot: Principles and Challenges Bin He, University of Minnesota | | |
| 10:00 - 10:45 AM | BREAK IN EXPO AREA | | |
| 10:45 AM - 12:00 PM |  Track 1: Changing the Way We Live and Work Room: Hiawatha 1 |  Track 2: Healthcare Robotics Room: Hiawatha 2 |  Track 3: Advanced Manufacturing Room: Hiawatha 3 |
| | A Look at Autonomous Vehicles Matt Nielsen, Autonomous Solutions, Inc. | PANEL: Robotics in Healthcare Robert Beachy, Axiom Business Concepts; Timothy Kowalewski, University of Minnesota; Lars Oddsson, Rx Function Inc.; James Van De Ven, University of Minnesota | How the PIPELINE Project is Helping Prepare the Future Workforce Heather McGannon, Minnesota Department of Labor and Industry |
| 12:00 - 1:00 PM | LUNCH BREAK - Cash buffet available in Expo Area | | |
| 1:00 - 1:45 PM |  KEYNOTE: Automated Retailing - Chad Stiernagle, Best Buy | | |
| 1:45 - 2:15 PM | Lessons Learned Eileen Manning, Robotics Alley Conference & Expo; Nilesh Mohan, Target Corporation | | |
| 2:15 - 2:45 PM | BREAK IN EXPO AREA | | |
| 2:45 - 4:00 PM |  Track 1: Changing the Way We Live and Work Room: Hiawatha 1 |  Track 2: Healthcare Robotics Room: Hiawatha 2 |  Track 3: Advanced Manufacturing Room: Hiawatha 3 |
| | The Future of Agriculture Patrick Christie, Conservis; Paul Gunderson, Dakota Precision Ag Center; Giselle Sendra, Robomow | The Feasibility of Westworld: 3D Printing for the Human Body Derek Mathers, Worrell Design | Automation 101: How to Buy a Robot John Burg, Acieta LLC |

2017 HIGHLIGHTS



Expo Area

Be sure to spend some time in the 2017 Robotics Alley Expo Area, which hosts a variety of interactive exhibits, including a segment of the Guinness World Record holder for "World's Largest K'NEX Ball Contraption," provided by Brickmania.



An integrated platform to engage the social, ethical, legal, and policy dimensions of robotics & automation

February 28th @ 1:00 PM - Robotics and automation are changing the way we live and work, how we monitor and care for our health, how we drive, how we grow our food, how we shop, and, of course, how we play. But how do we ensure that those changes are for the better?

The Forum combines on-site programming and interactive exhibit space with social media and live-stream video coordinated to the conference agenda:

- **Virtual Forum:** Follow along and participate with #RoboticsAlleyVPF on Twitter and Facebook
- **Legislator Panel:** Attend the discussion panel with key members of the Minnesota Senate and House of Representatives on the status of legislation that impacts robotics and related sectors
- **Expo Stage:** Stop by and hear one-on-one interviews with conference speakers and panelists about social, ethical, legal, and policy issues

Hosted by:



Join the Discussion & Share Your Thoughts!



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#RA2017



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Robotics Alley
Conference & Expo

EXPO STAGE SCHEDULE

Day 1, February 28

| | |
|----------|--|
| 10:10 AM | Nilesh Mohan , Target Corporation |
| 10:20 AM | Jacob Ward , Television Correspondent; Former Editor-in-Chief, Popular Science magazine |
| 10:30 AM | Arun Perinkolam , Deloitte |
| 12:05 PM | Summary of Morning Breakouts - Leili Fatehi & Laura Monn Ginsburg, Apparatus |
| 12:10 PM | Mack Traynor , CEO ReconRobotics |
| 12:20 PM | Brad Holschuh , University of Minnesota |
| 12:30 PM | Jason Huebscher , Gillette Children's Specialty Healthcare |
| 2:35 PM | Summary of Legislative Panel - Leili Fatehi & Laura Monn Ginsburg, Apparatus |
| 2:45 PM | Margaret Anderson Kelliher , MHTA |
| 5:10 PM | Cheryl Moeller , High Tech Kids |
| 5:20 PM | Mark Lawrence , FIRST Robotics |
| 5:30 PM | Mark Ritchie , EXPO 2023 |
| 5:40 PM | Don Craighead , 2017 Lifetime Achievement Award Honoree |

Day 2, March 1

| | |
|----------|--|
| 10:10 AM | Nilesh Mohan , Target Corporation |
| 10:30 AM | Aaron Sykes , MAVMeetup |
| 12:15 PM | Summary of Morning Breakouts - Leili Fatehi & Laura Monn Ginsburg, Apparatus |
| 12:20 PM | Heather McGannon , Minnesota Department of Labor and Industry |
| 12:30 PM | Lars Oddson , Rx Function |
| 2:20 PM | Chad Stiernagle , Best Buy |
| 2:30 PM | Changing the Way We Live and Work Leili Fatehi, Apparatus; Eileen Manning, Robotics Alley Conference & Expo |

NEW!



Lifetime Achievement Award Dinner

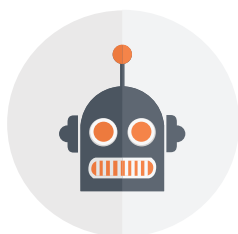
February 28th @ 6:30 PM

A gala dinner and award ceremony honoring Don Craighead for his influence and commitment to the Robotics Industry.



Expanded Drone Fly Zone™

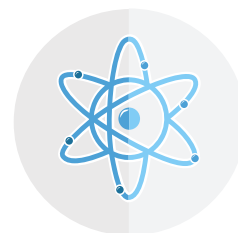
The Drone Fly Zone gives attendees a chance to practice piloting a drone using a virtual flight simulator and then put their skills to the test with a real unmanned aerial vehicle.



March of the Robots

February 28th @ 4:45 PM

Watch a parade of both industry and student robots march our red carpet. Hosted by Tyler Mason from AirVüz News.



STEM Showcase

February 28th @ 2:30 PM

See what the next generation of roboticists are working on and learn how student competitions embrace excellence for tomorrow's workforce.



2017 Invest in Innovation

February 28th @ 3:30 PM

Robotics Alley will host a group of innovative startups as they pitch their innovations to a group of VC investors.

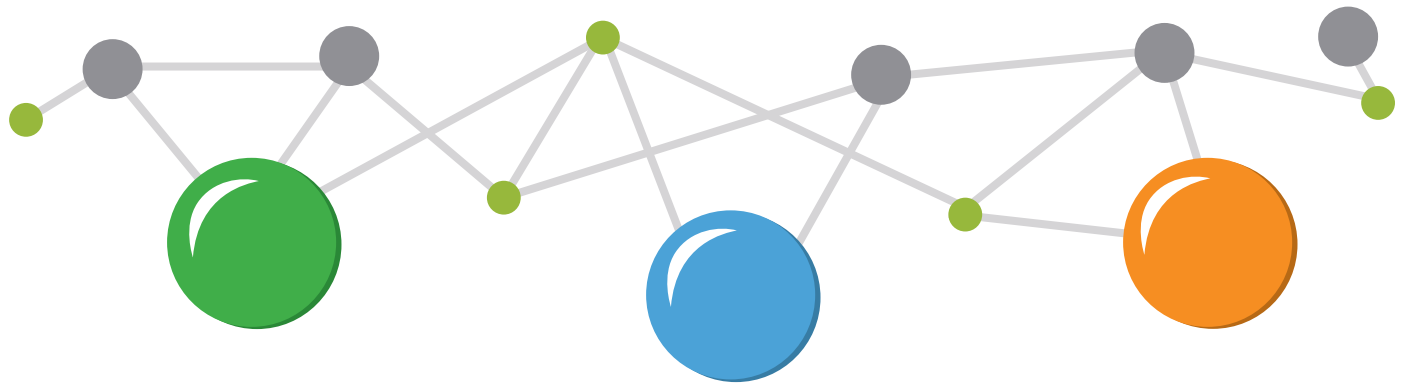
Presenters:



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2017 TRACK DESCRIPTIONS



Track 1: Changing the Way We Live and Work

Track 2: Healthcare Robotics

Track 3: Advanced Manufacturing

PANEL: Why Cybersecurity Should be a Top Priority for Robotics and IoT

10:45 AM - 12:00 PM

As robots and connected devices continue to become more integral to our daily lives, our security and privacy requires that we take care that the devices are not easily hacked or breached. Learn the risks and what can be done in this panel discussion.

Active Material Technology for Wearable Systems

10:45 AM - 12:00 PM

Active materials are a broad category of materials that can change shape/ dimension under stimulation. These materials – which vary wildly in capability, form, and actuation mode – enable new types of garments capable of changing shape on command.

PANEL: The Future of Additive and Digital Manufacturing

10:45 AM - 12:00 PM

New manufacturing techniques are revolutionizing the way goods are produced. They have also made possible the creation of Fab Labs, which house digital fabrication tools that can produce nearly anything. We look at today's technologies and where we go from here.

A Look at Autonomous Vehicles

10:45 AM - 12:00 PM

Autonomous vehicles are sure to change the way we live and work. From the autonomous car to driverless vehicles in mining, agriculture, automotive testing, military, industrial cleaning, security and more – learn what Autonomous Solutions is doing to revolutionize these industries.

PANEL: Robotics in Healthcare

10:45 AM - 12:00 PM

The field of healthcare robotics continues to grow as technology gets more versatile and lower cost tools become readily available. Come join this panel discussion with industry game changers to learn how robotics is being used in new and exciting ways.

How the PIPELINE Project is Helping Prepare the Future Workforce

10:45 AM - 12:00 PM

The PIPELINE (Private Investment, Public Education, Labor and Industry Experience) Project is an innovative way to address current and future workforce needs. It serves as a catalyst for developing industry-based, employer-driven, dual-training programs.

The Future of Agriculture

2:45 - 4:00 PM

Technologies including automation, big data and the Internet of Things are changing the face of agriculture on both a consumer and commercial level. Hear about varied innovations such as robotic lawn mowers and cloud-based agriculture management platforms.

The Feasibility of Westworld: 3D Printing for the Human Body

2:45 - 4:00 PM

HBO's hit show Westworld portrays an amusement park where robotic hosts are indistinguishable from living humans. The show remains in the realm of science fiction, but the concept of 3D printing for the human body is already happening today.

Automation 101: How to Buy a Robot

2:45 - 4:00 PM

If you are not considering robotic automation for your manufacturing operation, you need to be. The discussion will include several different paths you can take, to determine your need, getting your needs defined, where you find possible suppliers, making your decision on a supplier — and then the real fun starts.

Day 1, February 28

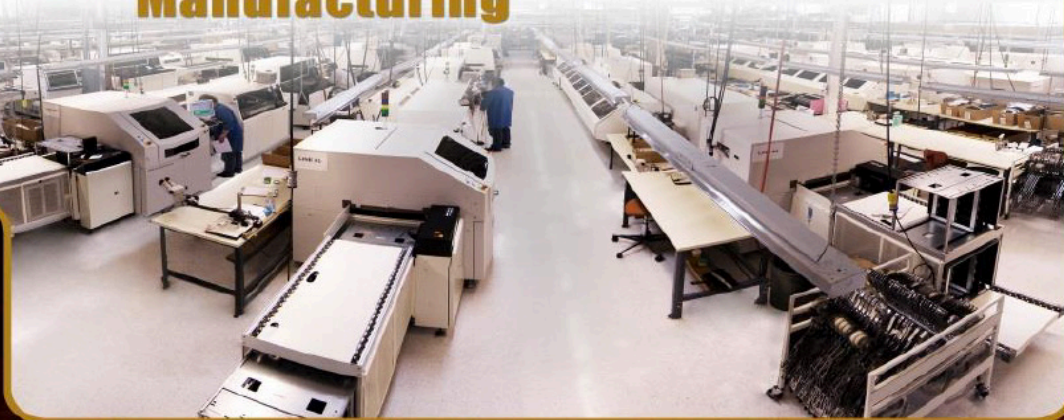
Day 2, March 1

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Patrick Cole

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Martin Buehler
Executive R&D
Imagineer,
Walt Disney
Imagineering

*Why You Are in the "Robot
Experiences" Business*

► Millions of guests visit Disney Parks each year to explore fantastic places, experience unforgettable attractions, and interact with Disney characters. In this talk, Martin Buehler will discuss the approach, challenges, and future of using advanced robotics (and a little magic) to bring Disney characters of all shapes and sizes to life in the real world. In the process you may see why we all are (or should be) in the robot experiences business, no matter what industry we are in.



Dr. Bin He
Director, Institute
for Engineering in
Medicine, UMN

*Mind-Control of a
Robot: Principles and
Challenges*

► Dr. Bin He will discuss the principles and basics behind mind-controlled devices – brain-computer interface (BCI). Dr. He will focus on motor-imagery based BCI which translates subjects' intention to action, and discuss the neuroscience basis, engineering technologies, and experimental designs to establish such capability, ranging from controlling of a computer cursor, a virtual helicopter, a drone, and a robotic arm. Recent experimental results will be discussed, demonstrating noninvasive mind-control of a robotic arm.



Elwin Loomis
Senior Director,
Store of the
Future, Target
Corporation

*Creating a Community
of Disruptors*

► The Twin Cities boast a well-diversified economy supported by many leading global innovators. The challenge is bringing these verticals together in a way that cross-pollinates the cool things that are happening and creates even more powerful results. In his keynote, Elwin Loomis will discuss the advantages this region has, the talent challenges it faces, and the need to effectively network to bring together the pockets of creativity that already exist. On the way, he will highlight some major players in our area as well as smaller gems you may not be aware of.



Dan Mallin
Managing Partner
and Founder,
Equals 3, LLC

*The Art of the Possible –
Building an AI Application*

► Never before have we collected more data, yet when an individual needs to use the knowledge extracted from the data, they are more likely to use Google than access the multiple internal systems that house enterprise data. Dark Data is all of the data a company has created, commissioned, leased or acquired that is mostly unavailable to employees. It includes structured or tabular data and unstructured data. Lucy allows employees access to dark data through a single interface. She, is used by marketers for research, segmentation and planning. Even if you are not a Marketer, this will help you understand the art of the possible with AI.



Chad Stiernagle
Senior Director,
Automated Retail,
Best Buy

Automated Retailing

► Chad Stiernagle, Senior Director of Automated Retail at Best Buy, is the founder of Best Buy Express and CHLOE (instore robotic solution in NYC). In his keynote presentation, he will focus on automation in retail stores, identifying challenges facing brick-and-mortar retailers and highlighting the potential of automation and robotics.



Jacob Ward
Television
Correspondent;
Former Editor-
in-Chief, Popular
Science magazine

Automatic Ethics

► Who do you sue when a robot car crashes? Should a commander in the field hand the power of life and death to an automated system? And what happens when voice-recognition software becomes confused by an adult suffering from dementia? Jacob Ward, former editor-in-chief of Popular Science and current television correspondent for Al Jazeera and PBS, will discuss the unseen ethical dilemmas posed by the steady automation of our jobs, our movements, and our relationships.

2017 SPEAKERS



Rep. Tony Albright

Representative,
Minnesota House
of Representatives
*Virtual Policy Forum
Legislator Panel*



Leili Fatehi

Owner, Apparatus
Public Affairs, LLC
Virtual Policy Forum



Jason Huebscher

CTO, Gillette
Children's Specialty
Healthcare
*The Future of
Additive and Digital
Manufacturing*



Robert Beachy

CTO, Axium
Business Concepts
*Robotics in
Healthcare*



Todd Fronek

Attorney, Larkin
Hoffman
*Invest in Innovation
Judge*



Margaret Anderson Kelliher

President and CEO,
Minnesota High Tech
Association (MHTA)
*Virtual Policy Forum
Legislator Panel*



John Burg

Founder, Acieta LLC
*Automation 101: How
to Buy a Robot*



Laura Monn Ginsburg

Owner & Principal,
Apparatus Public
Affairs, LLC
Virtual Policy Forum



Tommy Kenville

Founder/Rainmaker,
Tglobal, Inc.; Board of
Directors, Unmanned
Applications Institute
*Invest in Innovation
Judge*



Patrick Christie

Founder,
EVP Business
Development,
Conservis
*The Future of
Agriculture*



Steven Goldsmith

Professor, Michigan
Technological
University
*Why Cyber Security
Should be a Top Priority
for Robotics and IoT*



Senator Amy Klobuchar

Minnesota State
Senator, United
States Senate
*Welcome Remarks
via video*



Larry Doerr

Chief Operating
Officer, Rev
Materials
*The Future of
Additive and Digital
Manufacturing*



Paul Gunderson

Director Emeritus,
Dakota Precision
Ag Center
*The Future of
Agriculture*



Timothy Kowalewski

Richard and Barbara
Nelson Assistant
Professor, Dep.
of Mechanical
Engineering, UMN
Robotics in Healthcare



Senator Kari Dziedzic

Senator, Minnesota
State Senate
*Virtual Policy Forum
Legislator Panel*



Brad Holschuh,

Co-Director,
Wearable Technology
Laboratory, UMN
*Active Materials
Technology for
Wearable Systems*



Eileen Manning

Executive Producer,
Robotics Alley
Conference & Expo
*Opening Remarks
Lessons Learned*



Tyler Mason

Director of
Digital Marketing,
AirVüz News
*March of the Robots
Emcee*



Arun Perinkolam

Principal, Deloitte
*Why Cyber Security
Should be a Top
Priority for Robotics
and IoT*



Scott Simenson

Director, Century
Digital Fab Lab,
Century College
*The Future of
Additive and Digital
Manufacturing*



Derek Mathers

Director, Advanced
Applications
Development, Worrell
*The Feasibility of
Westworld: 3D Printing
for the Human Body*



Paul Rudin

President and
Co-Owner, Symmetry
Solutions, Inc.
*The Future of
Additive and Digital
Manufacturing*



Deepinder Singh

CEO, 75F
*Invest in Innovation
Presenter*



Heather McGannon

Special Projects Unit
Manager, MN Dep. of
Labor and Industry
*How the PIPELINE
Project is Helping
Prepare the Future
Workforce*



David Russick

Founder, Managing
Director, Gopher
Angels, LLC
*Invest in Innovation
Judge*



Rep. Paul Thissen

Representative,
Minnesota House of
Representatives
*Virtual Policy Forum
Legislator Panel*



Nilesh Mohan

Director, Global
Supply Chain &
Logistics, Target
Corporation
*Opening Remarks
Lessons Learned*



James Ryan

Owner & Founder,
Litmus Logic, LLC
*Why Cyber Security
Should be a Top
Priority for Robotics
and IoT*



Nina Tucker

Co-Founder and Vice
President of Client
Services, Twin Oaks
Computing
*Why Cyber Security
Should be a Top Priority
for Robotics and IoT*



Matt Nielsen

Director of
Marketing,
Autonomous
Solutions
*A Look at
Autonomous Vehicles*



Scott Schwalbe

CEO, NimbeLink
*Invest in Innovation
Presenter*



James Van De Ven

Associate Professor,
Department
of Mechanical
Engineering, UMN
Robotics in Healthcare



Lars Oddsson

Rx Function
*Robotics in
Healthcare*



Giselle Sendra

Digital Marketing
Director, Robomow
USA
*The Future of
Agriculture*



Gary Wishnatzki

Co-Founder, Harvest
Croo Robotics
*Invest in Innovation
Presenter*

*Congratulations, Don,
on this well-deserved
recognition.*

*Hugh Schilling and
Horton Holding, Inc.*



**Century College in White Bear Lake
Congratulates
Don Craighead
Lifetime Achievement Award**



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**THANK YOU, DON!
YOU'VE HELPED US INSPIRE
THE NEXT GENERATION OF
INNOVATORS AND ENGINEERS.**



We are honored to recognize
**Mr. Don
Craighead**

for his dedication & leadership
in the Robotics Industry.

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ACHIEVEMENT AWARD DINNER

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Don Craighead, 2017 Lifetime Achievement Honoree

The Robotics Alley Conference & Expo's first annual Lifetime Achievement Award will be presented at a gala dinner on Tuesday, February 28, at 6:30 p.m.

The inaugural Robotics Alley Lifetime Achievement Award celebrates Don Craighead, founder of Power/mation and longtime technology, automation and STEM advocate. Don has spent a long career pushing boundaries, building connections and mentoring the next generation. His Rolodex of contacts is legendary, and his presence is a familiar feature at a wide variety of technology-related events, especially ones focused on engineering or education.

Read more about Don and his influence in the robotics and automation industry on the following page

2017 LIFETIME ACHIEVEMENT AWARD

The seeds of what would become his life's work were planted early. Don was always curious about technology and had an aptitude for math and physics, so when his high school advisors encouraged him in those areas, he decided to pursue engineering.

Don ended up enrolling at the University of Minnesota. His father had graduated from vocational school, so Don would be the first generation of his family to attend college. In 1957, he completed a bachelor of mechanical engineering degree. According to Don, it was an extremely difficult five-year program, with many dropouts along the way.

"On the first day, a professor said, 'Look at the person to your left and then look at the person to your right. By the end of this course, one of them won't be here,'" Don recalls. "I said, 'You guys decide, but I'm going to stick.'"

In addition to the formal education he received, Don credits his experience with the university's work-study program with providing him hands on exposure to the world. He worked for Cornelius, a company that made beverage dispensing equipment for brands like Coca Cola and is still a leader in the field today. He also got a position with Baldwin Supply Company, where his father worked, and he stayed on after graduating. Shortly thereafter, he left to form Craighead & Associates, the company that would eventually become Power/mation.

"Early on I called on General Mills, and they needed a piece of equipment, so they placed the order through us," he says. "I took the order, fulfilled it and that was the start of it."

Growing Business

Craighead & Associates began working with power transmission products and photoelectric switches, and it eventually morphed into an automation hardware business. Today the company has offices in multiple states throughout the Midwest.

As Power/mation grew, Don also became involved with the early robotics company RAM, based in Red Wing, Minn. He served on the RAM board as that company developed innovative uses of automation for food services and other industries, and was working with the company when it was eventually acquired by Minnesota food giant Schwan's.

In addition, while still CEO of Power/mation, he was already active in the community, working with groups he would maintain lifelong relationships with, including the University of St. Thomas and his alma mater The University of Minnesota.

Working in the Community

By 1990, Don was ready to make his work outside of Power/mation his full-time focus, so he sold the company to four of its sales representatives. That freed him up to start working more with young people and on community-related projects. At the time, the concept of STEM education was just starting to emerge, and he was among the earliest supporters of student robotics teams (which have since grown to rival most high school sports leagues). Drawing on his background as a salesman and a marketer, Don even invented a series of patches that could be affixed to robotics team uniforms.

After the sale of Power/mation, Don also formed the The Craighead Family Fund of The St. Paul Foundation to direct his philanthropic activities. As the name of the fund implies, Don is a family-focused person, and many of the non-profits and boards he finds himself involved with tie back to things his family members are passionate about. His wife Sandra Craighead, for example, has long worked with the Girl Scouts organization.

Don is a longtime Rotarian, and the service-focused mission of that group has directed much of his charitable work alongside his dedicated involvement with his church.

Family Focus

Outside of work, Don was long involved with the St. Paul Winter Carnival, acting the role of the Prince of the West Wind. However, his greatest joy comes in supporting his family and others.

"I don't spend a lot of time of the golf course," he says. "And I have no need to travel for pleasure – I did that for many years for business. I don't care about receiving more things for myself. Giving is what makes me happy."



Agenda

| | |
|----------------|--|
| 5:00 - 6:30 PM | Expo Hall Reception Try your hand at flying a drone, listen to experts on the Expo Stage, explore technology on the expo floor and see what our future is working on in the STEM Showcase. |
| 6:30 - 6:45 PM | Dinner Seating |
| 6:45 - 7:00 PM | Welcome - Eileen Manning, Executive Producer, Robotics Alley Conference & Expo |
| 7:00 - 7:05 PM | Blessing - Wayne Shelton, Minister |
| 7:05 - 7:45 PM | Bon Appétit - Enjoy Dinner! |
| 7:45 - 8:30 PM | Lifetime Achievement Award Tributes <i>Tim York, CEO, Power/mation</i> <i>Robert Stephens, Founder, The Geek Squad, Former CTO, Best Buy</i> <i>The Works Museum</i> <i>Durga Panda, Century College Foundation</i> <i>Jerry Jordahl, Century Foundation Emeritus</i> <i>Scott Simenson, Director, Century Digital Fab Lab, Century College</i> <i>Bonnie Holub, Director, Master Data Scientist, Cognizant</i> <i>Don Weinkauff, Dean of Engineering, University of St. Thomas</i> <i>Ronald J. Bennett, Ph.D., P.E, Founding Dean & Professor Emeritus, University of St. Thomas</i> <i>Fred Zimmerman, Professor Emeritus, University of St. Thomas</i> <i>Hugh Schilling, Founder, Horton</i> <i>Mark Olson, President, APG Cash Drawer</i> <i>Bob Fayfield, Founder & CEO, Banner Engineering</i> |
| 8:30 - 8:45 PM | Award Presentation |
| 8:45 PM | Our Honoree, Don Craighead |

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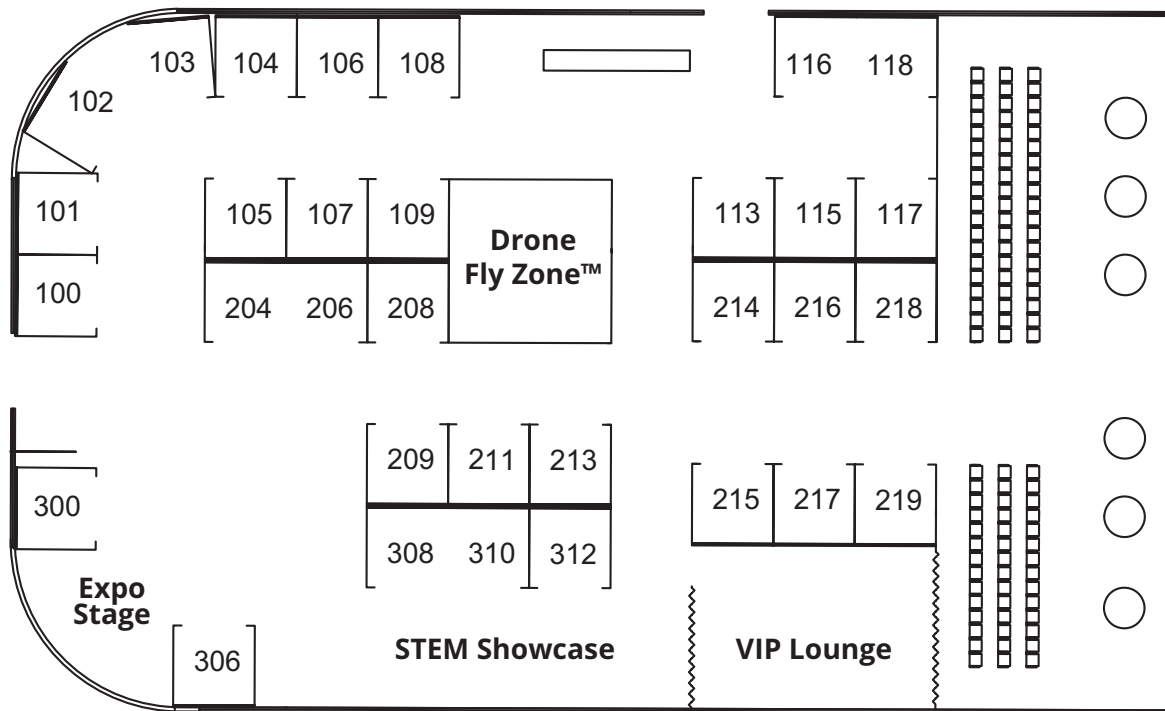


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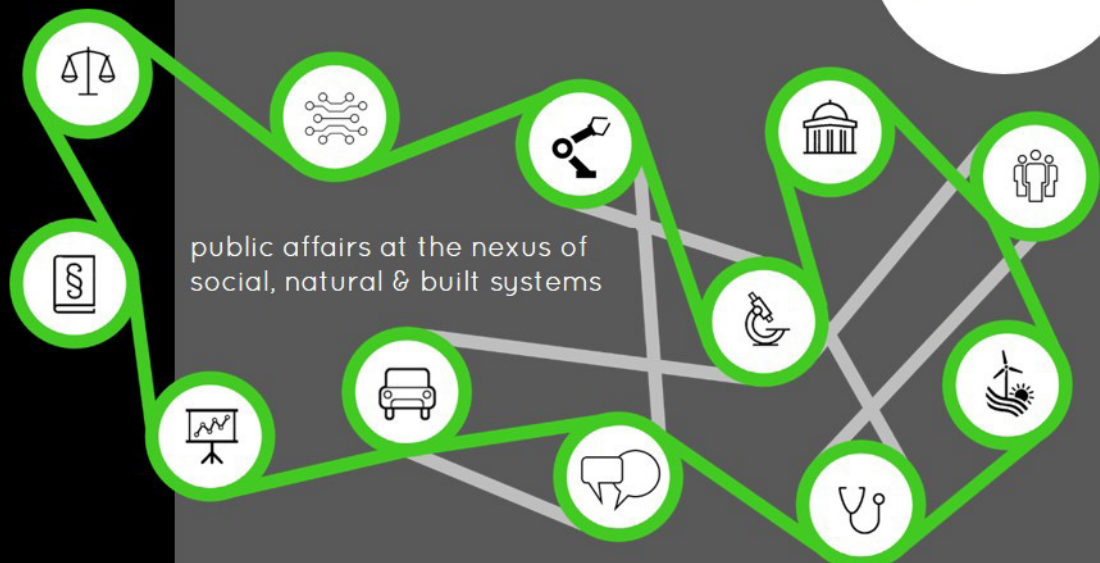
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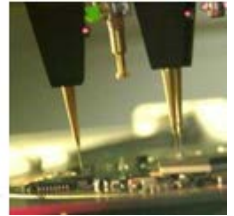
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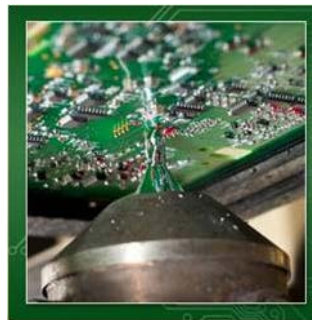
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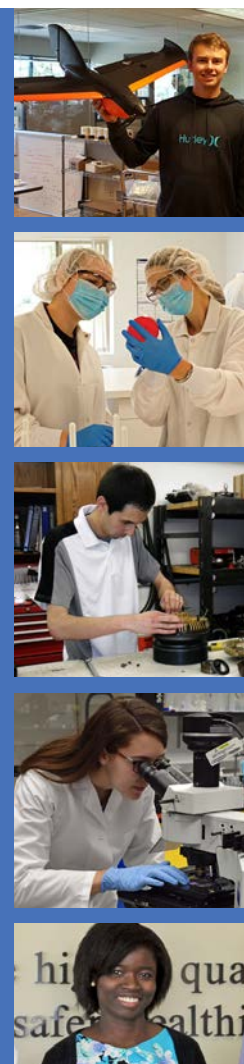
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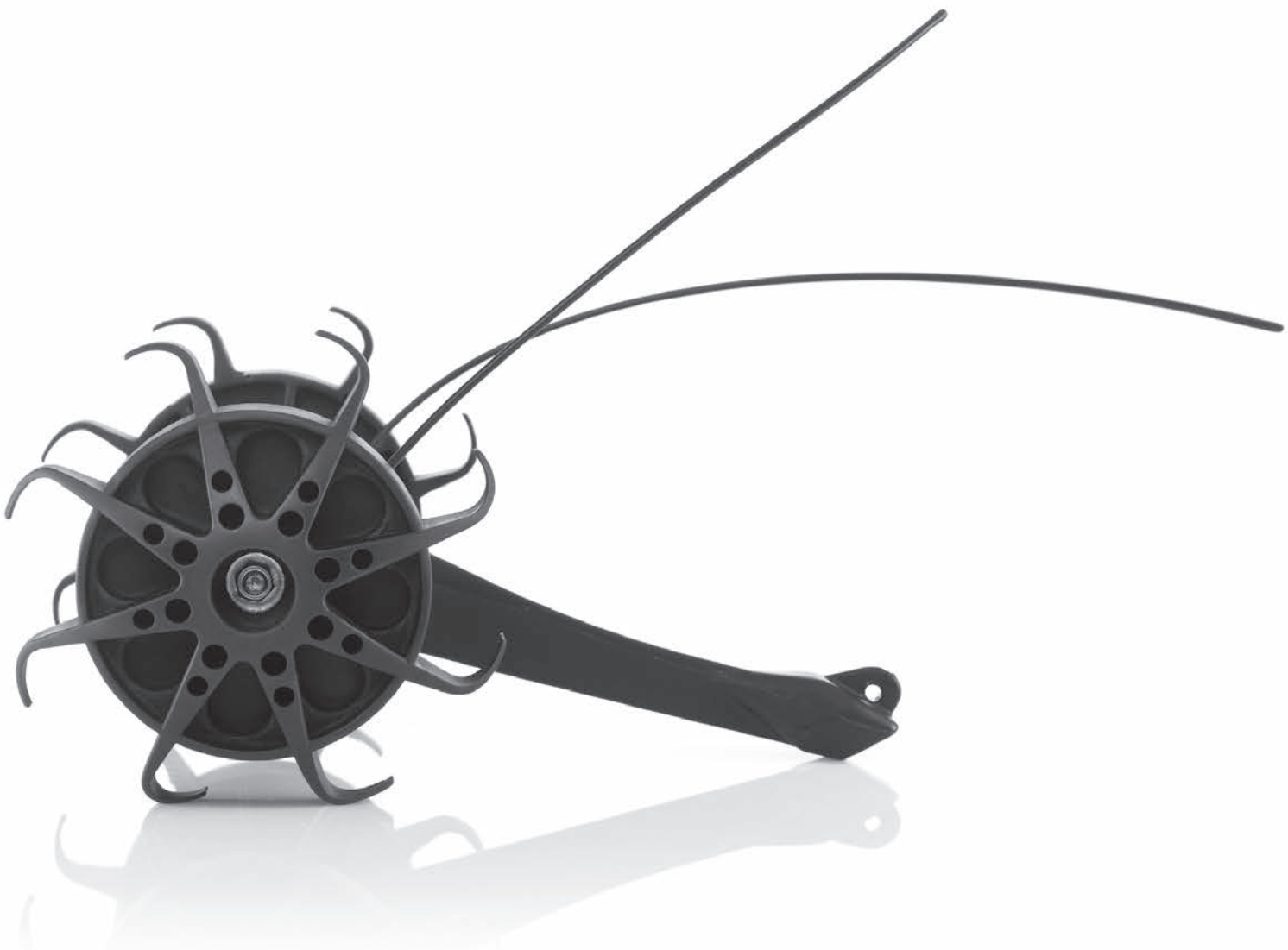


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