

Preparing for the Future of Intelligent Systems

INTRODUCTION TO THE SPRING PROGRAM

3.16.18



INNOVATION RESEARCH
INTERCHANGE

Accelerating Value Creation

Welcome and Introductions

SPRING Team



Jeff Cope



Jim Redden



Adrienne Brown

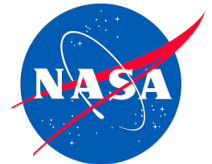


Tom Culver

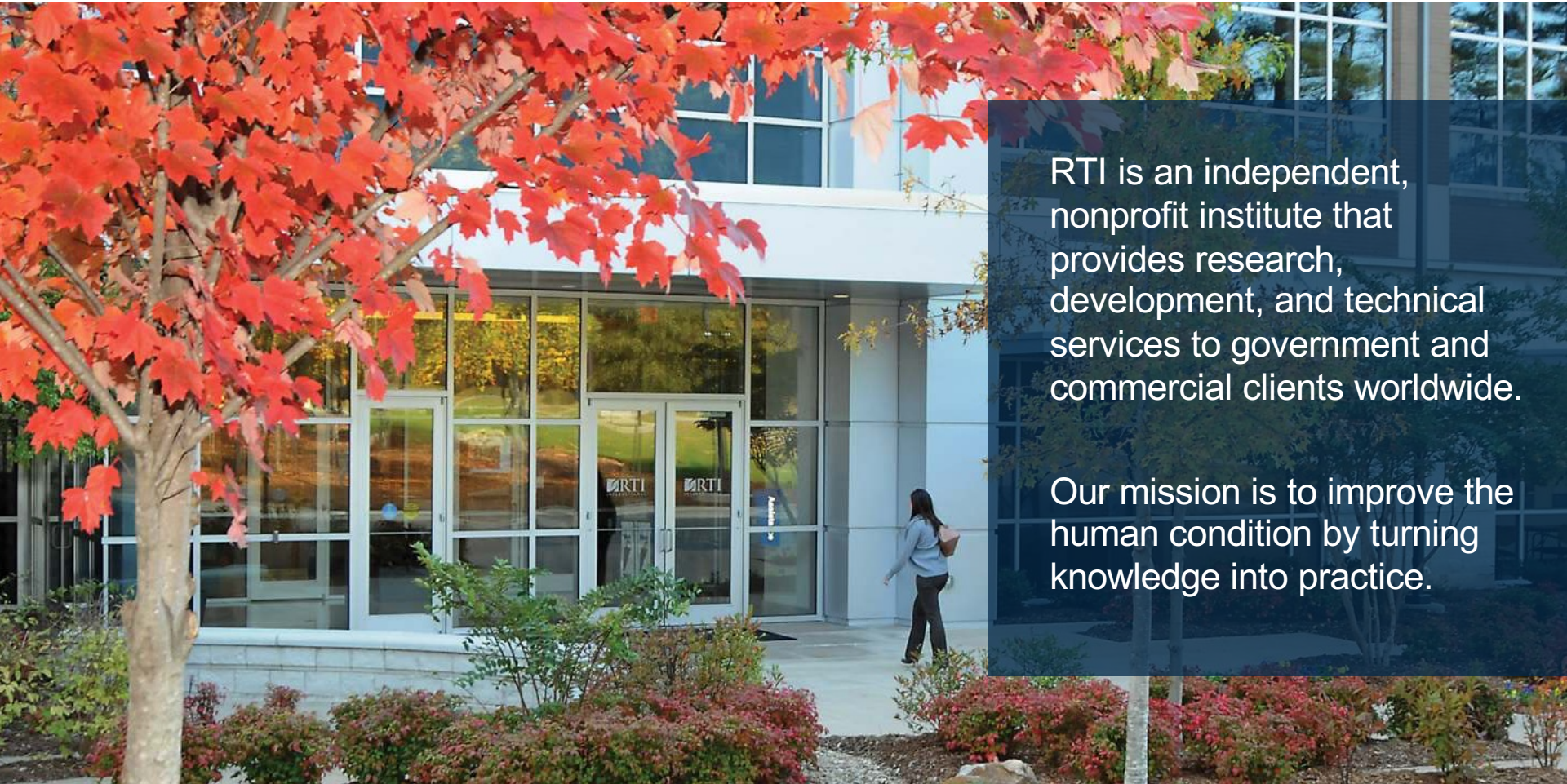


Lee Green

SPRING Advisory Board



Who is RTI International?



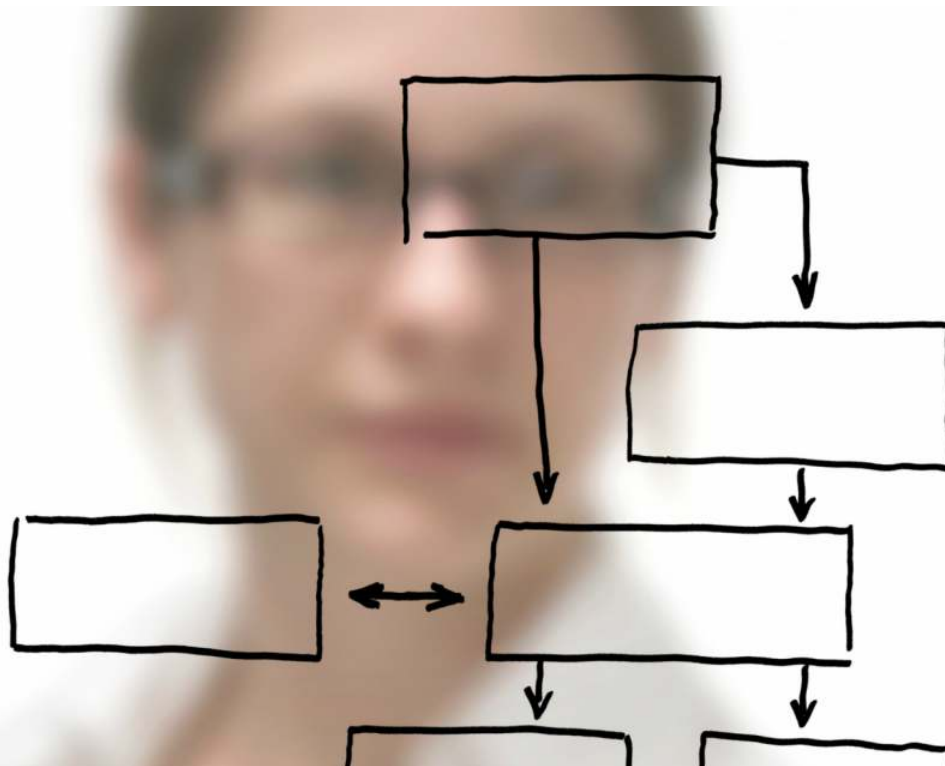
RTI is an independent, nonprofit institute that provides research, development, and technical services to government and commercial clients worldwide.

Our mission is to improve the human condition by turning knowledge into practice.



Practice Areas

Multidisciplinary expertise and research insights our clients need to inform policy, practice, and programs



SPRING = Sourcing PRedictive Insights for New Growth

The pace of change is increasing...

The future will be markedly different from today...

SPRING = Sourcing PRedictive Insights for New Growth

How can I ensure that my organization is adequately prepared to capitalize on future opportunities and recognize future threats to my business?

How might autonomous and connected robots revolutionize logistics and workforce?



<https://www.youtube.com/watch?v=fUyU3IKzoio>

How will AI and machine learning technologies impact the future?



<https://www.youtube.com/watch?v=AmUC4m6w1wo>

How do we separate the signal from the hype?



<https://www.youtube.com/watch?v=Cx5aNwnZYDc>



SPRING Program Guiding Principles

Organizations want confidence and conviction about how to prepare for the future

Using foresight best practices is a key for future exploration

SPRING success requires external insights combined with internal context – we need you!

Facilitating impact inside your company requires more than a report

Cross industry perspectives are key for learning

Participating in SPRING will allow you to develop:

1. Deeper understanding of emerging opportunities and threats related to intelligent systems
2. Insights about how others are preparing for the future of intelligent systems
3. An opportunity to consider the implications of alternate futures for your organization

Smart Horizons: Preparing for the Future of Intelligent Systems

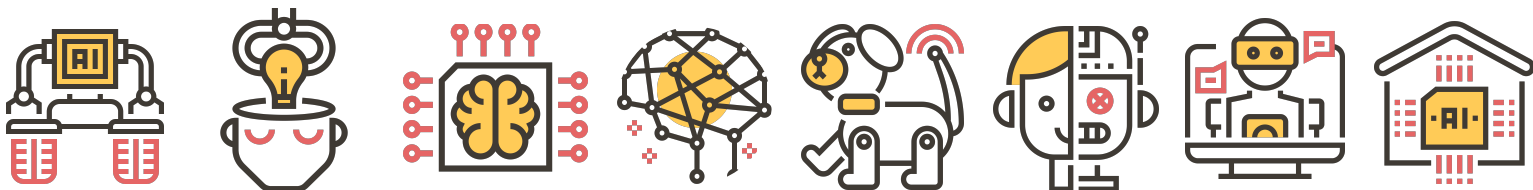
What do we mean by Intelligent Systems?

A technologically advanced machine or connected set of machines...

that perceive and respond to the surrounding digital or physical world...

often learning from experience, supporting people, or completing tasks...

that can range from the simple and repetitive to the very difficult and complex.



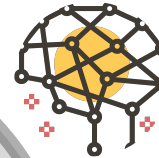
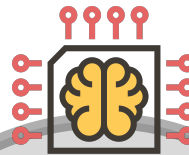
The Future of Intelligent Systems

We can explore the future of Intelligent Systems in many domains.

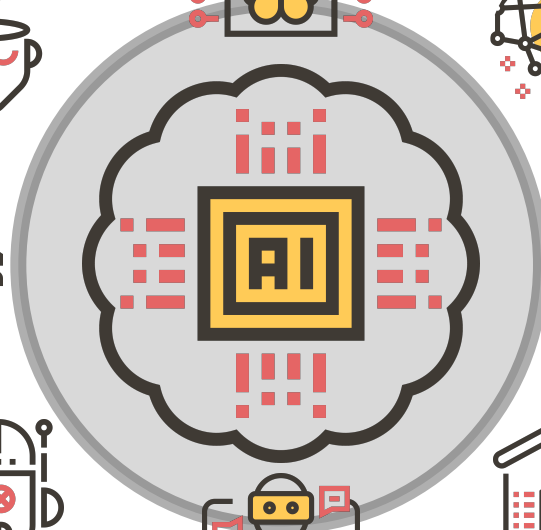
Learning Systems

Multi-agent learning

Explainable AI



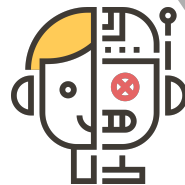
Machine-Human Collaboration



Autonomy



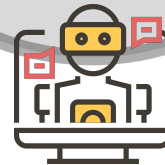
Affective computing



Ambient & Industrial Intelligence



Adversarial AI



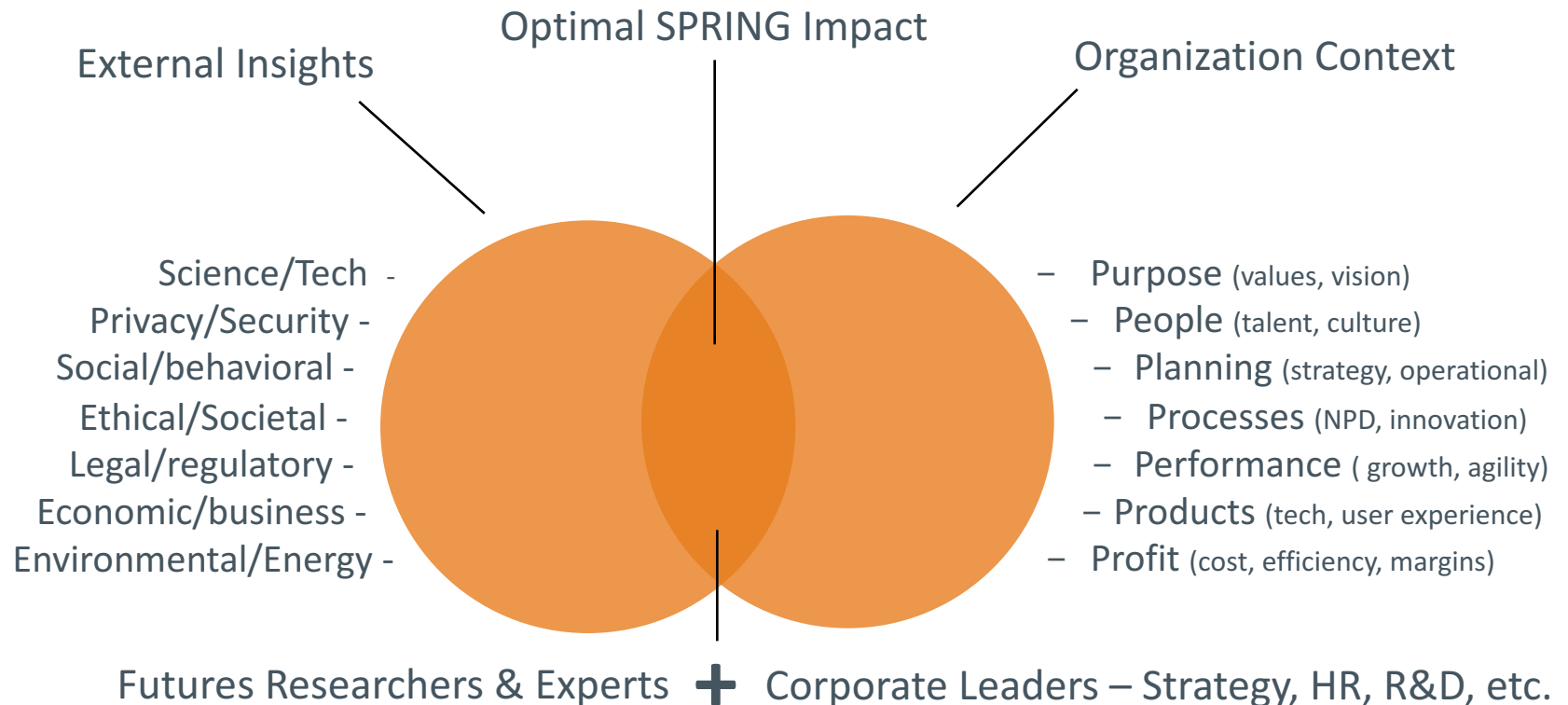
SPRING Foresight Process



With multiple “Engagement” elements

SPRINGBOARD Conference
October 23-24
@ RTI’s new Horizons building

SPRING = Sourcing PRedictive Insights for New Growth





SPRING Program Elements

- Curated Content Modules
- Field Trips
- Thought Leader Interviews
- In-person workshops
- Two Day Conference

Building organizational conviction through a foresight process requires more than reading a report



SPRING Program Elements

Curated Content Modules

Field Trips

Thought Leader Interviews

In-person workshops

Two Day Conference

Framing

Orienting

Scanning

Foresight

Visioning

Planning

Action

Module 0: What is SPRING?

Module 1: Why Foresight?

Module 2: Introduction to Intelligent Systems

Module 3: Current State of Intelligent Systems

Module 4: Emerging Trends and Future Signals

Module 5: Intelligent Systems Key Drivers,
Trends, and Barriers

Module 6: Looking at Intelligent Systems
Through Multiple Lenses

Module 7: Intelligent Systems Alternate Futures

Module 8: Moving from Insights to Implications

Module 9: Bringing the Potential of Intelligent
Systems to Your Organization

Bonus: Preparing your Organization for the
Future of Intelligent Systems

Bonus: Partnering and Collaboration for
Innovation in Intelligent Systems



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SPRING Early Access Event:
Trend Immersion to SXSW
Intelligent Futures Track.

March 9-12
AUSTIN, TX



Thursday June 07, 8:30 am – 2:00 pm

Spring Immersion Trip to the GA Tech Robotarium & the Microsoft Innovation Center

Abstract

Tour the first-of-its-kind, remotely accessible swarm robotics lab. The Robotarium houses more than 100 rolling and flying swarm robots that are accessible to everyone. *Trial Microsoft's HoloLens, the first self-*



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FEATURED KEYNOTE SPEAKER

The Power and Limits of Deep Learning

Yann LeCun, Facebook, 2018 Medalist

Yann LeCun is Chief AI Scientist at Facebook since late 2013, and a professor of Data Science, Computer Science, Neural Science, and Electrical Engineering at New York University since 2003. LeCun received an EE Diploma from ESIEE (Paris) and holds a PhD in Computer Science from Université Pierre et Marie Curie in 1987. After a postdoc at the University of Toronto, he joined AT&T Bell Laboratories, then became head of the Image Processing Research Department in 1996. His research interests include machine learning and artificial intelligence, and he is best known for his work in deep learning and the invention of the convolutional network method which is widely used for image, video, and speech recognition.





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Breaking Boundaries

What's now. What's next.

JUNE 4-7, 2018

Marriott Marquis, Atlanta, GA
Co-located with the NSF SBIR II Conference

REGISTER NOW



10:30 am - 12:00 pm

SPRING Trend Immersion: Moving from Information to Insights [View Details](#)

Interactive Breakout

10:30 am – 11:15 am

Perspectives in Strategic Foresight, Part 1: How Foresight can guide machine learning and machine learning can support better foresight outcomes [View Details](#)

Interactive Breakout

11:15 am – 12:00 pm

Perspectives in Strategic Foresight, Part 2: Horizon Scanning Methods to Detect Emerging Technology [View Details](#)

Interactive Breakout

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Note: Space is limited. Register early.

“This is all great, how do I get more involved?”

1. *Build an internal team to participate as a cross functional group*
2. *[Register for the Conference](#) in October – Space is Limited*
3. *Sign up today to receive SPRING updates and exclusive content
(email green@iriweb.org)*
4. *Engage with various program elements over the next six months*
5. *Consider becoming a SPRING Pioneer*

Become a SPRING Pioneer

We are recruiting a select group of participants to engage at a deeper level with program content and help shape the future of SPRING.

As a Pioneer, you get

- Facilitated small group x-industry interactions with other Pioneers
- Priority access to limited-space events (field trips, etc)
- Additional content and collaboration with RTI and other experts

Being a Pioneer is the most immersive way to bring the benefits of SPRING back to your organization

For more information and to sign up to be a pioneer

- Email Lee Green Green@iriweb.org by Friday March 30th



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| Innovation Advisors

Questions?

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