Research@Intel 2012

10th Anniversary

Research@Intel 2012

Justin Rattner
Chief Technology Officer
Intel Corporation

What You'll See Today

R@I 2012: Facets of Future Life

My Life

- Virtual dressing room
- Immersive shopping
- Life without keys

My Car

- Intelligent headlights seeing through rain
- Research-driven “automobility”

My Job

- Visual analytics for complex projects
- Real-time assistant for group conversations

Essential Tech

- 3D Web
- The face of security
- Context-aware video streaming

University Collaborations Panel

Featuring Leaders from Intel Research Centers from Around the World

SOCIAL COMPUTING
United States

Paul Dourish

BIG DATA
United States

Pradeep Dubey

COMPUTATIONAL INTELLIGENCE
Israel

Ronny Ronen

SECURE COMPUTING
Germany

Dr. Matthias Schunter

SUSTAINABLE CONNECTED CITIES
United Kingdom

Charlie Sheridan

Hosted by Limor Fix, *Director, University Collaborative Research*

Screening Room, 2nd Floor, 11:15 a.m.–12:00 p.m.

Tech Trends Table Talks

Featuring Intel Principal Investigators from Around the World

CONNECTED CONTEXT COMPUTING

Jane Hsu
ICCCC NTU PI

Yen-Kuang Chen
ICCCC Intel PI

CLOUD & BIG DATA

Pradeep Dubey
ISTC-BD Intel PI

Greg Ganger
ISTC-CC CMU PI

SECURE COMPUTING

John Manferdelli
ISTC-SC Intel PI

Matthias Schunter
ICRI-SC Intel PI

VISUAL COMPUTING

Pat Hanrahan
ISTC-VC Stanford PI

Jim Hurley
ISTC-VC Intel PI

EMBEDDED & PERVASIVE COMPUTING

Priya Narasimhan
ISTC-EC CMU PI

Dieter Fox
ISTC-PC UW PI

Over Lunch in the Grand Lobby, 12:00-1:00 p.m.

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My Car: Automotive Research Breakout

Brian David Johnson
Futurist and Director
Future Casting
Interaction & Experience Research
Intel Labs

Screening Room,
2nd Floor,
1:00-1:30 p.m.

Innovative Industrial Research in the 21st Century

- New collaborative research models
- Innovation over invention

New Models for Global University/Industry Research

Intel Collaborative Research Institutes (ICRIs)

Technion Israel Institute of Technology — **Computational Intelligence**

TECHNISCHE UNIVERSITÄT DARMSTADT — **Secure Computing**

UCL Imperial College London — **Sustainable Connected Cities**

Connected Contextual Computing

UNIVERSITÄT DES SAARLANDES — **Visual Computing**

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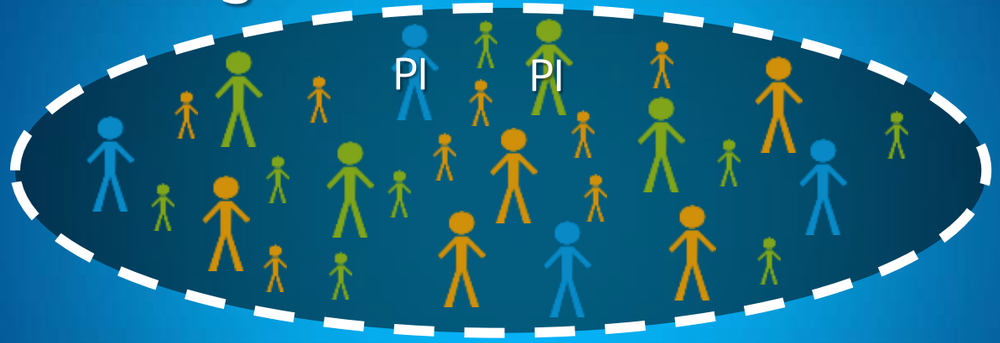
Breaking Barriers to U.S. University Collaboration

Intel Science & Technology Centers (ISTCs)

Creating New Research Communities



Intel Researchers | Hub Univ. Researchers | Spoke Univ. Researchers

- University of Washington — Pervasive Computing
- Stanford University — Visual Computing
- Berkeley, University of California — Secure Computing
- Carnegie Mellon University — Cloud Computing
- Massachusetts Institute of Technology — Big Data
- Carnegie Mellon University — Embedded Computing

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Breaking News: The ISTC for Social Computing

The 7th and Newest Intel Science and Technology Center

Paul Dourish
ISTC-Social Academic PI
Professor of Informatics,
UC Irvine

Genevieve Bell
Intel Fellow and Director
Interaction & Experience
Research, Intel Labs

First ISTC focused on exploring the future of people and technology

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Praise for the ISTC for Social Computing

"This is a fantastic proposal. In fact it's not only the best proposal I have seen in the social sciences – at some point I would like to use it as a paradigmatic example of a great proposal on deeply significant and timely issues that need to be explored and problematized."

John Seely Brown
Former Chief Scientist of Xerox & director of Xerox PARC

Research Agenda

Exploring IT and Digital Media as Social and Cultural Phenomena

Re-thinking information as grounded in materials and physical objects

How we relate to each other in, around, and through data

Moving beyond “the user” as the center of user experience and user-centered design

Group-embedded technical creativity and how it can change the world

Digital representations and algorithms that change how we understand ourselves

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Innovative Industrial Research in the 21st Century

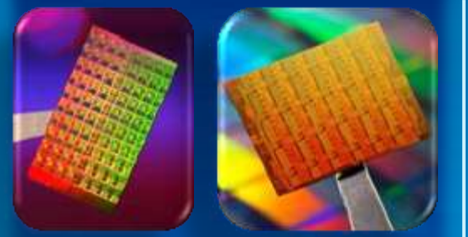
- New collaborative research models
- **Innovation over invention**

Invention to Innovation

10 Years of Measurable Intel Product Roadmap Impact

INVENTED@INTEL LABS

Light Peak



Polaris & Single-chip Cloud Computer

Platform Power Management

THUNDERBOLT™

intel inside™ Xeon® Phi™

intel Atom™ inside™

INTEL PRODUCT INNOVATIONS

See All Ten Hall of Fame Technologies in the Grand Lobby

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Questions?

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