Universities as drivers of AI research and innovation

Georgia Tech College of Computing

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Computing - Leading GT Research

Georgia Tech College of Computing

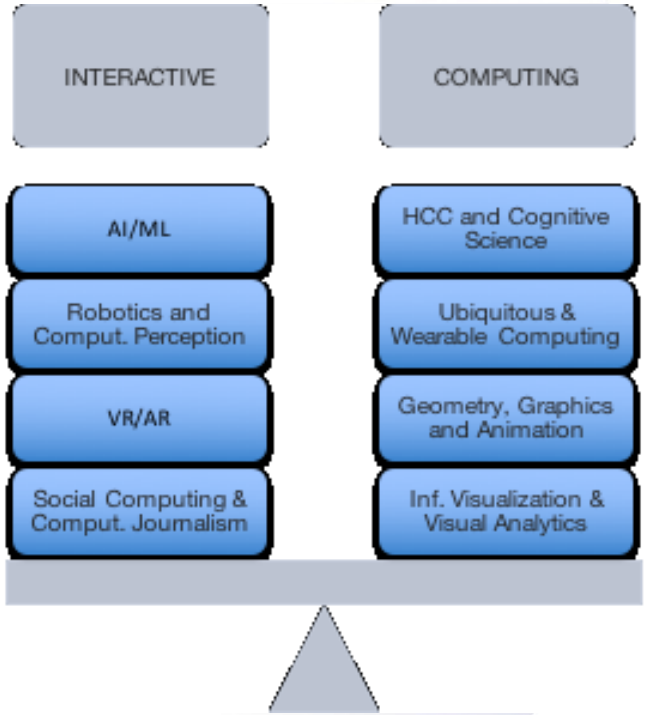
IRIs (11 total across GT)

- Institute for People & Technology
- Institute for Robotics & Intelligent M
- Institute for Data Engineering & Scie
- Institute for Information Security & F

IRCs (12 total across GT)

- GVU Center
- Center for Research into Novel Comp Hierarchies (CRNCH)
- Center for Machine Learning (ML@G

School of Interactive Computing (IC)



OUR RESEARCH AI AND MACHINE LEARNING

Georgia Tech College of Computing

- The Center for Machine Learning at Georgia Tech
- Aims to establish sustainable research entity that leverages Georgia Tech's various disciplines to create leaders and train the next generation of machine learning pioneers
- Spearheads Georgia Tech's new Ph.D. in Machine Learning (est. 2017)

100+ total faculty

5 schools represented

OUR RESEARCH ROBOTICS & COMP. PERCEPTION

Georgia Tech College of Computing

- The Institute for Robotics and Intelligent Mach
- Launched in 2013, IRIM breaks through disciplinary boundaries to achieve transformat research in medical robotics and human augmentation, autonomy, and collaborative robotics, among other areas.
- Spearheads Georgia Tech's Ph.D. in Robotics, widely recognized as one of the top programs i the country

Georgia Tech Robotics & Intelligent Machines

70+ total faculty

180+ graduate students

Virtual Teaching Assistants: Jill Watson

Georgia Tech School of Interactive Computing

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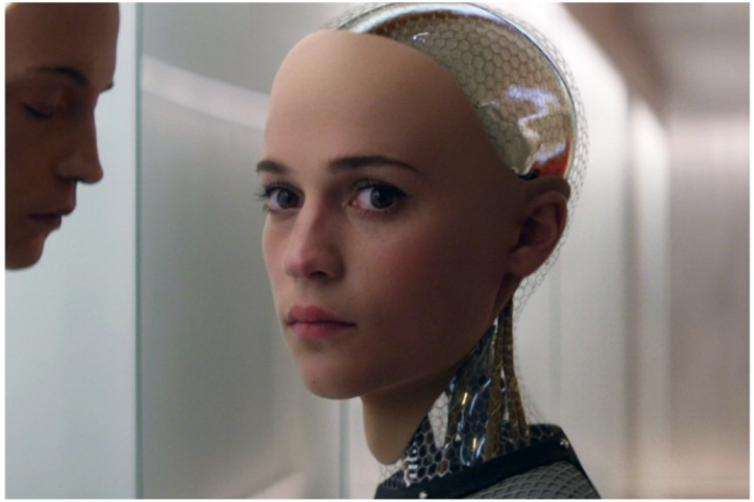
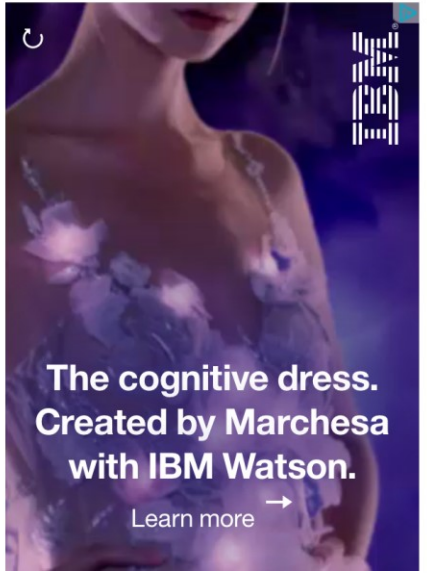
Imagine Discovering That Your Teaching Assistant Really Is a Robot

Students mostly couldn't tell 'Jill Watson' wasn't human; 'Yep!'



In the 2015 film 'Ex Machina,' above, a young man assesses the human characteristics of a beautiful robot. *PHOTO: EVERETT COLLECTION*

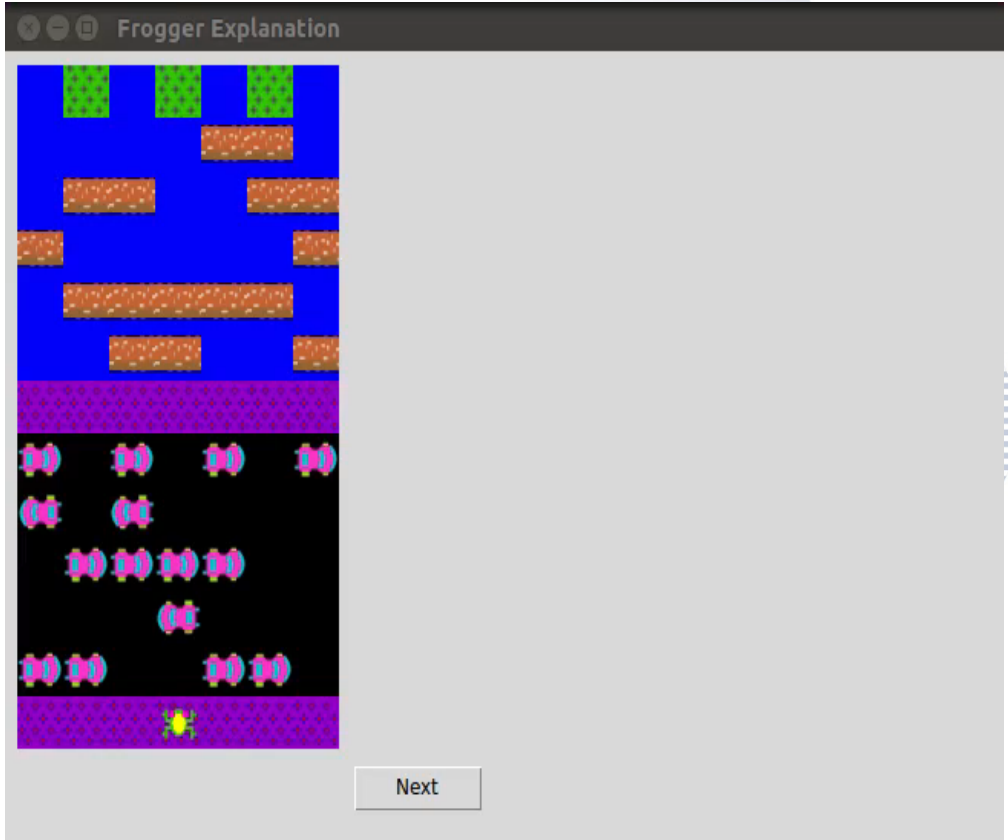


Augmented Reality/Head Worn Displays

- AR significantly improves the speed of order picking over traditional pick-by-voice system.

Natural Language Processing/Explainable AI

- Rational AI agents can make decisions that are optimal but also hard to comprehend by end-users
- AI Rationalization: An automatically generated explanation comparable to what a human would say if he or she were controlling the robot in the same situation



OUR PODCAST, THE INTERACTION HOUR

- Establish thought leadership from Georgia Tech in discussing the major issues impacting AI and the world.
- Available on iTunes and Spotify under “The Interaction Hour.”

gt computing ON AIR

THE Interaction Hour

- Ron Arkin
  - Ethics in autonomous vehicles and AI in warfare.

- Sauvik Das
  - How our social natures could inform development of cybersecurity tools.

- Munmun De Choudhury
  - How social media can provide clues to our mental wellbeing.

IEP, INDUSTRY ENGAGEMENT PROGRAM

- Creates a vibrant, mutually beneficial link between the School of Interactive Computing (IC) and industry.
- By joining IEP, companies have direct access to some of the world's top emerging experts in AI
- Offerings provide companies expertise to tackle complex real-world problems in every commercial sector: health to finance, e-commerce to transportation, technology to agriculture, and more.

Georgia Tech School of Interactive Computing

Find us online…

www.ic.gatech.edu

@ICatGT

Thank you!