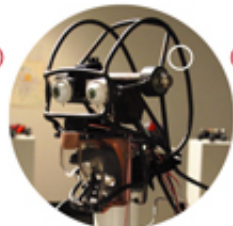




## Core faculty

Colin Allen	History and Philosophy of Science
Sasha Barab	Learning Sciences, Education
Randall Beer	Computer Science
John Beggs	Physics
Bennett Bertenthal	Psychological and Brain Sciences
Geoffrey Bingham	Psychological and Brain Sciences
Katy Borner	Library and Information Science
Joshua Brown	Psychological and Brain Sciences
Jerome Busemeyer	Psychological and Brain Sciences
Thomas Bussey	Psychological and Brain Sciences
Rowan Candy	Optometry
Phil Connell	Speech and Hearing Sciences
Donald Cunningham	Education
Kenneth deJong	Linguistics
Daniel Dinnsen	Linguistics
Thomas Duffy	Learning Sciences, Education
Michael Dunn	Informatics
William Estes	Psychological and Brain Sciences
Julie Fox	Telecommunications
Steven Franks	Linguistics
Michael Gasser	Computer Science
Lisa Gershkoff-Stowe	Speech and Hearing Sciences
Judith Gierut	Speech and Hearing Sciences
Jason Gold	Psychological and Brain Sciences
Robert Goldstone	Psychological and Brain Sciences
Melissa Gresalfi	Learning Sciences, Education
Amit Hagar	History and Philosophy of Science
Andrew Hanson	Computer Science
Douglas Hofstadter	Computer Science
Thomas James	Psychological and Brain Sciences
Michael Jones	Psychological and Brain Sciences
Ellen Ketterson	Biology
Diane Kewley-Port	Speech and Hearing Sciences
John Kruschke	Psychological and Brain Sciences
Sandra Kuebler	Linguistics
Annie Lang	Telecommunications
David Leake	Computer Science
Richard Lesh	Learning Sciences, Education
Jonathan Mills	Computer Science

Left: Prof. Douglas Hofstadter and students meet at the Center for Research on Concepts and Cognition.  
Right: Robot created by graduate student Mike Brady.



## Core faculty *continued*

Lawrence Moss	Mathematics
Javed Mostafa	Library and Information Science
Sharlene Newman	Psychological and Brain Sciences
Robert Nosofsky	Psychological and Brain Sciences
Timothy O'Connor	Philosophy
John Paolillo	Library and Information Science
Lutz Pessoa	Psychological and Brain Sciences
David Pisoni	Psychological and Brain Sciences
Jonathan Plucker	Education
Nicholas Port	Optometry
Robert Port	Linguistics
Robert Potter	Telecommunications
Luis Rocha	Informatics
Yvonne Rogers	Library and Information Science
Kathy Schick	Anthropology
Steven J Sherman	Psychological and Brain Sciences
Richard Shiffrin	Psychological and Brain Sciences
Martin Siegel	Informatics
Eliot Smith	Psychological and Brain Sciences
Linda Smith	Psychological and Brain Sciences
Olaf Sporns	Psychological and Brain Sciences
Erik Stolterman	Informatics
Julie Stout	Psychological and Brain Sciences
William Timbertake	Psychological and Brain Sciences
Peter Todd	Informatics
Nicholas Toth	Anthropology
James Townsend	Psychological and Brain Sciences
Michael Trosset	Statistics
Stanley Wasserman	Statistics and Sociology
Jonathan Weinberg	Philosophy
Larry Yaeger	Informatics
Chen Yu	Psychological and Brain Sciences

## Indiana University Cognitive Science Program

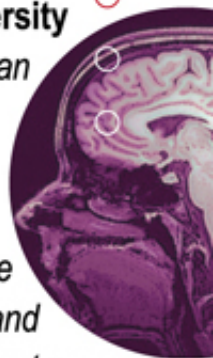
College of Arts and Sciences  
Eigenmann 819, 1910 East 10th Street  
Bloomington, IN 47406-7512

Phone: (812) 855-0031 Fax: (812) 855-1086

# COGNITIVE SCIENCE

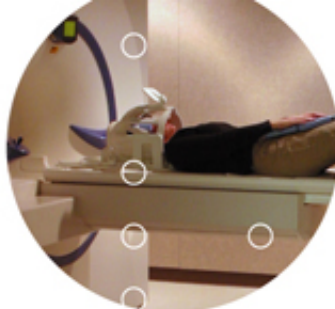
at Indiana University

*Bloomington is an interdisciplinary program dedicated to understanding the nature of minds and other intelligent systems.*



Our curriculum fosters skills in computation, neuroscience, research design, philosophical analysis, and statistics while delving into core topics in artificial intelligence, cognitive architecture, communication, consciousness, creativity, culture, expertise, information theory, language, learning, memory, perception, philosophy of mind, reasoning, representation, and social cognition.

 INDIANA UNIVERSITY  
BLOOMINGTON



### Undergraduate Program:

We offer stand-alone B.A. and B.S. degrees in Cognitive Science, as well as double degrees and minors. We offer positions for one-year visiting undergraduate students interested in pursuing cognitive science. We also offer summer research fellowships, and year-round research and laboratory opportunities.

**Graduate Program:** Our program has over 90 graduate students pursuing either stand-alone or joint Ph.D. degrees, or Ph.D. minors. Fellowships are available to both entering and continuing students. Applications are available from [www.cogs.indiana.edu/academic/admissions.html](http://www.cogs.indiana.edu/academic/admissions.html)

**Facilities:** Indiana University has many research resources available to the local cognitive science community. These include: a 3-Tesla fMRI neuro-imaging center, a state-of-the-science robotics laboratory, immersive virtual reality and visualization laboratories, advanced computer laboratories for studying large-scale social interaction, and a world-class supercomputer.

**Faculty:** Our internationally renowned faculty includes 71 core and 75 affiliated members, from 8 departments in the College of Arts and Sciences, and the Schools of Informatics, Library and Information Science, Business, Music, Optometry, and Education. We believe that large-scale applications of cognitive science to educational reform, automatic object recognition, user interface design, the treatment of neurologically impaired patients, machine translation, computerized speech production and recognition, real-world robotics, and information storage, search, and retrieval will depend on cross-fertilization, communication and collaboration among the fields that comprise cognitive science.

For more information, visit <http://www.cogs.indiana.edu> or contact [cogsci@indiana.edu](mailto:cogsci@indiana.edu)

### Fields

Anthropology  
Biology  
Computer science  
Communications  
Education  
Information science  
Linguistics

Mathematics  
Neuroscience  
Philosophy  
Political science  
Psychology  
Speech & hearing

### Tools and Methods

Computer simulation  
Cross-cultural analysis  
Evolutionary computation  
Behavioral experiments  
Logic  
Mathematical models

Neural networks  
Neuro-imaging  
Psychophysiology  
Robotics  
Statistics and data mining  
Symbolic artificial intelligence

### Specialties

Agent-environment interaction  
Analogy  
Animal behavior  
Artificial life  
Concepts and categorization  
Cognitive development  
Cognitive neuroscience  
Complex systems  
Language computation  
Dynamical systems

Embodied cognition  
Evolution and adaptation  
Judgment, reasoning, and decision making  
Learning science  
Machine learning  
Mathematical and computational models of thought  
Robotics  
Social networks  
Vision science



Cover: Slice of human cortex mounted on a 60-channel electrode array, courtesy of Jon Hobbs and John Beggis; structural brain image from the new Siemens 3 Tesla MRI, courtesy of the IU Imaging Research Facility.

Above, left to right: ROBOVOVA-1, manufactured by Hitech Robotics and used in Prof. Randall Beer's course on embodied cognition; eye tracking and position sensing equipment used in a multisensory experiment, courtesy of Chen Yu; the Siemens 3 Tesla MRI.