

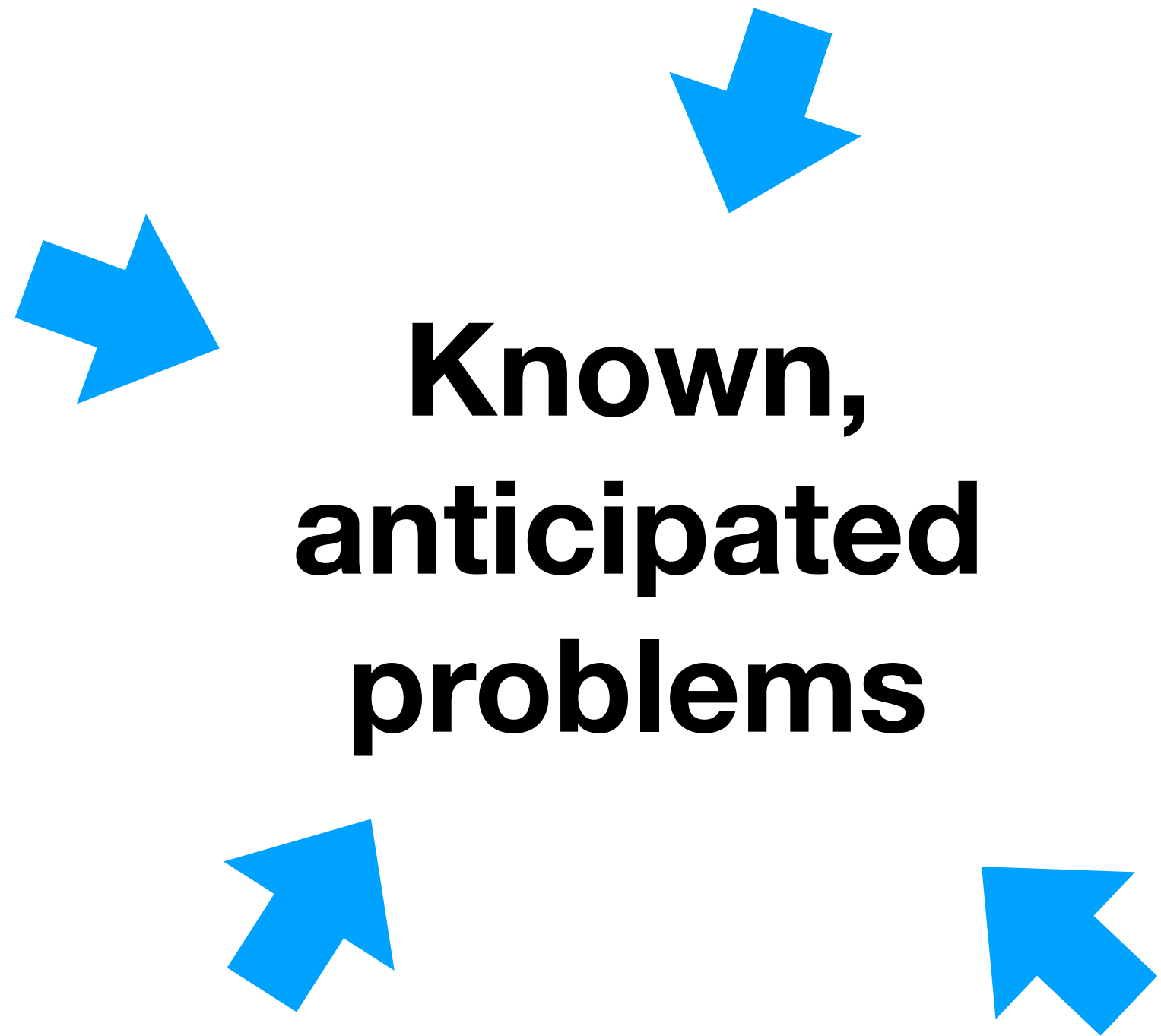
Cornell Information Science Virtual Visit Day!

David Mimno, Director of Graduate Studies



**Known,
anticipated
problems**

***UNKNOWN,
UNANTICIPATED
PROBLEMS***



*UNKNOWN,
UNANTICIPATED
PROBLEMS*

PostEverything • Perspective

A lawsuit against ICE reveals the danger of government-by-algorithm

+ Add to list

The immigration agency's New York office tweaked risk-evaluation software to keep thousands in jail, watchdog groups say.

Humans + Computation =
Cornell InfoSci

Humans + Computation +
Dramatic Rushing Water =
Cornell InfoSci

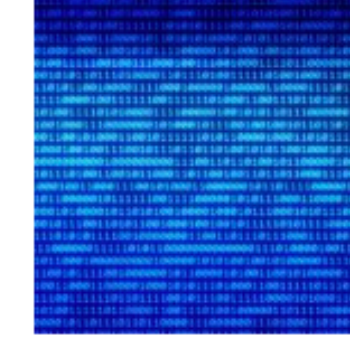


Research Areas



Computational Social Science

Growing use of the Internet and social media in the past decade has led to an explosion in the amount of social and behavioral data available to researchers.



Critical Data Studies

Cornell scholars in critical-data studies examine the impacts of big data and algorithmic tools on culture, society, policy, law, and more.



Data Science

While their specific areas of research and inquiry vary, data scientists at Cornell share in a similar aim: to leverage computational methods to inform and improve society.



Economics and Information

Information Science-affiliated researchers within Economics and Information exhibit interdisciplinary knowledge of algorithms, networks, mathematics and more.



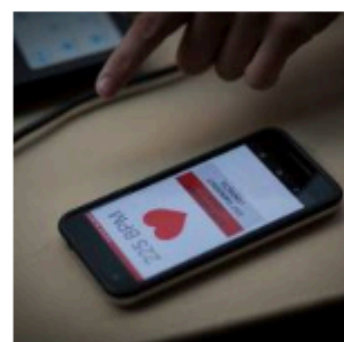
Education Technology

Info Sci faculty within the Education Technology research area specialize in the design, development and evaluation of information technologies for education.



Ethics, Law and Policy

Cornell researchers in Ethics, Law and Policy explore how to govern emerging technologies, examine how tech challenges existing legal and policy frameworks, and how to mediate their risks while reaping their benefits.



Human-Computer Interaction

The Human-Computer Interaction research area brings together a diverse core of Cornell designers, builders and investigators who help further our understanding of interactive technologies and their uses.



Human-Robot Interaction

The Human-Robot Interaction research area is comprised of Info Sci faculty and field faculty members who investigate ways robots can better our lives, whether by direct companionship and collaboration or improving team settings.



Incentives and Computation

How do incentives guide or shape our online behavior? Cornell researchers in the Incentives and Computation area explore these questions and more.



Infrastructure Studies

Infrastructure Studies investigates technology's place in our culture, evaluating how we use and consider evolving technology.



Interface Design and Ubiquitous Computing

Interface Design and Ubiquitous Computing looks at how to design technology that fits people, examines the differences in individuals, environments and contexts and enables technology to help people in making them more healthy, connected, and productive.



Natural Language Processing

Cornell researchers in NLP are interested in computational models of human language and machine learning, applying a computational lens to a broad set of projects in the areas of linguistic analysis, natural language understanding systems, social science, and humanities.



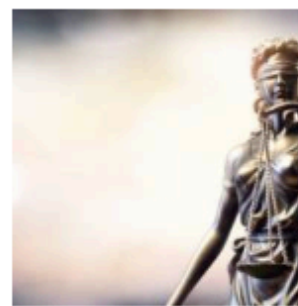
Network Science

Once again highlighting the interdisciplinary nature of research areas within Information Science, Network Science houses Cornell computer and information scientists whose interests extend into sociology, economics, applied mathematics, and more.



Social Computing and Computer-supported Cooperative Work

In the broadest sense, Social Computing and Computer-supported Cooperative Work research area looks at how to make technology more human-centered. Bridging diverse areas like human-computer interaction, design, crowdsourcing, natural language processing and much



Technology and Equity

As technology increasingly reshapes and directs our world, questions of fairness and equity become critical areas of inquiry – How biased is the data that feeds the algorithm to decide whether or not you are eligible for a home loan?

Cornell IS is different because...

- Founded ~2005
- CIS: Strong overlap in space, faculty with Computer Science, Statistics
- Field system encourages lots of interdisciplinary collaboration
- PhD Minor
- Culture of fun, respect, curiosity!

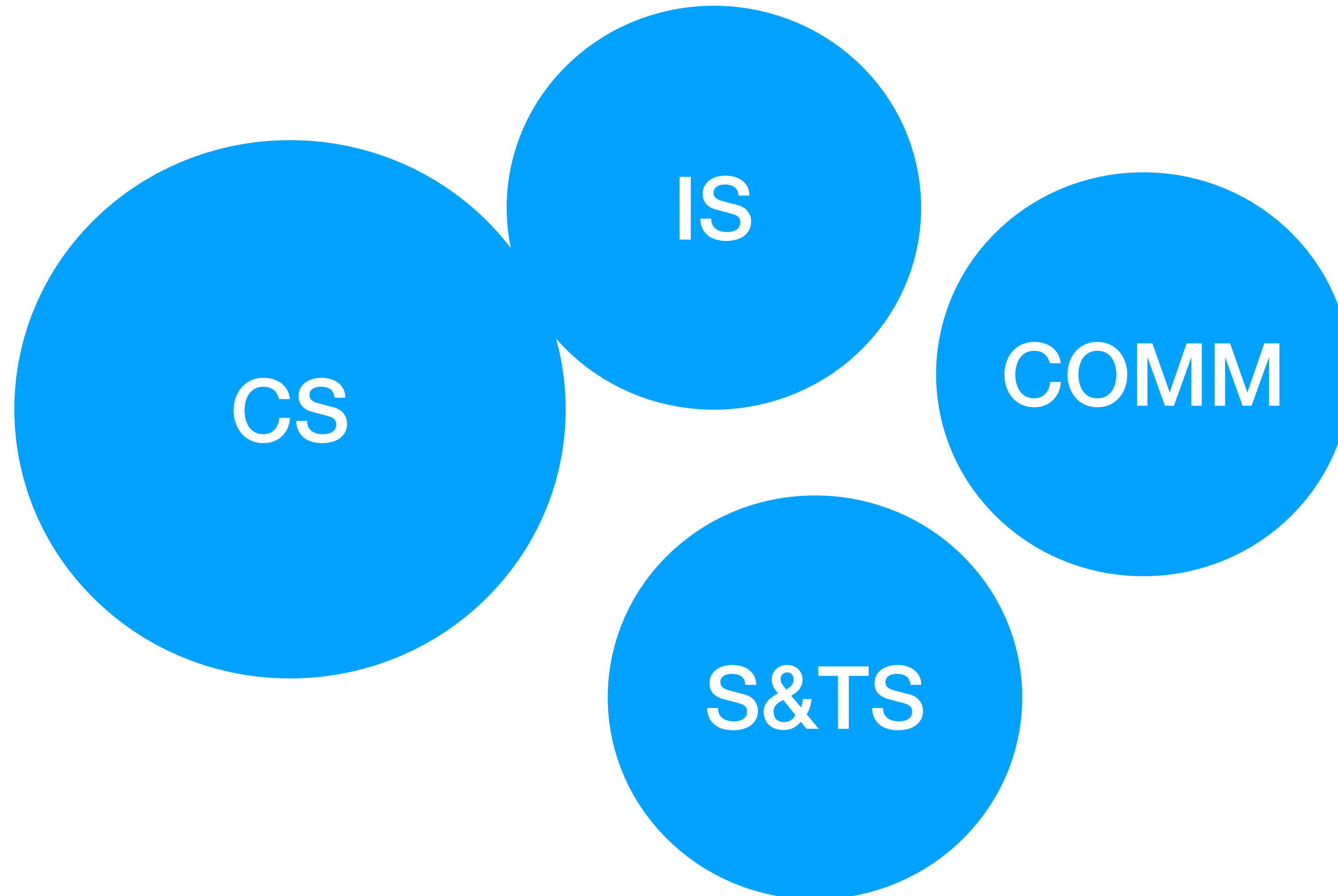


We connect with...

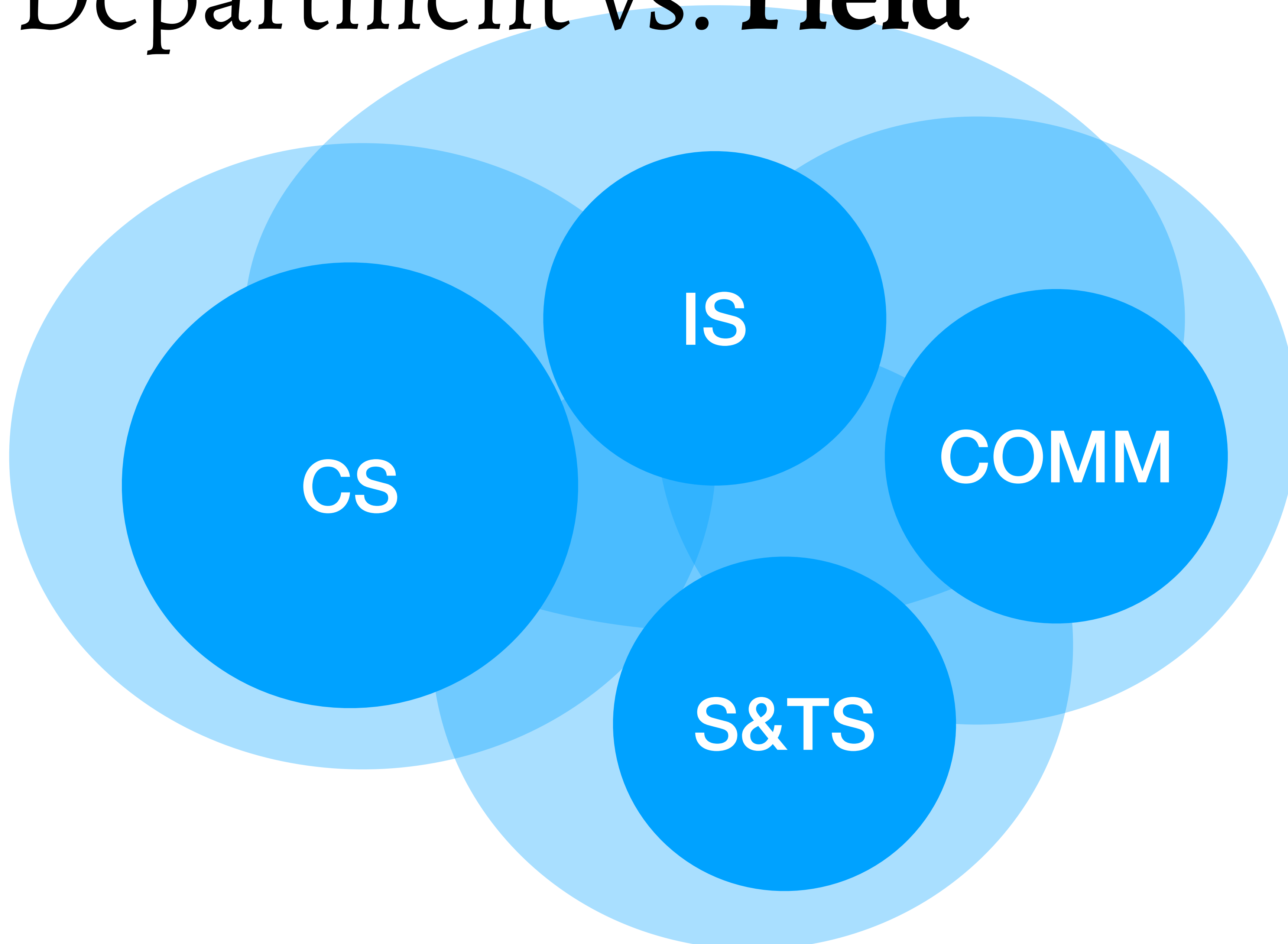
- Classics
- Cognitive Studies
- Communications
- Computer Science
- Design and Environmental Analysis
- Economics
- English
- Law school
- Linguistics
- Mathematics
- Operations Research
- Psychology
- Sociology
- Science & Technology Studies

and more!

Department vs. Field



Department vs. **Field**



Our field is growing

- 2016: Tapan Parikh, Karen Levy, Bobby Kleinberg, Helen Nissenbaum
- 2017: Solon Barocas, Jeff Rzeszutarski, Drew Margolin, David Shmoys
- 2018: Cheng Zhang, Andrea Won, Rebecca Slayton, Rene Kizilcec, James Grimmelman
- 2019: Cindy Hsin-Liu Kao, Will Hobbs, Cristobal Cheyre
- 2020: Aditya Vashistha, Rajalakshmi Nandakumar, Matthew Wilkens, ...

Where do graduates go?

- Assistant Professor, Information Sciences and Technology, Penn State University
- Assistant Professor, Computer Science, University of Toronto
- UX Researcher, Google NYC and visiting researcher, Crowd Innovation Lab, Harvard Business School
- Postdoctoral Scholar in Computer Science, Stanford University.
- Assistant Professor, Computer Science, UMass-Amherst
- UX Researcher, Airbnb
- Post-doctoral Researcher, Madeira Interactive Technologies Institute, Portugal
- UX Researcher, Facebook
- Assistant Professor, Computer Science, University of British Columbia

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- Post-doctoral Researcher, Madeira Interactive Technologies Institute, Portugal
- UX Researcher, Facebook
- Assistant Professor, Computer Science, University of British Columbia

How to graduate

- Year 1-2:
 - Finish all **core courses** plus most additional course work (including towards **Ph.D. minor**)
 - Constitute your special committee (by end of third semester in program)
 - Preliminary development of research program (including through work with **advisor** and other faculty research programs)
- Year 3:
 - Complete “**A-exam**” by end of third year
- Year 5-ish: Complete and defend dissertation work (“**B-exam**”)

Finding an advisor

- You already have a prospective first-year advisor
- Changing isn't ordinary, but it's normal and not uncommon
- Department = Startup incubator



Core Classes — ways of thinking

- Computational Methods for Information Science Research
- Information, Technology, and Society
- Behavior and Information Technology
- Networks, Crowds and Markets: Foundations for Formal Analysis and Design
- Design Studio



PhD Minors

- Classics
- Cognitive Studies
- Communications
- Computer Science
- Design and Environmental Analysis
- Economics
- English
- Law school
- Linguistics
- Mathematics
- Operations Research
- Psychology
- Sociology
- Science & Technology Studies

and more!

One program, Two campuses





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How to make a good decision

- PhD “student” = a job with an unusual benefits package. Who do you want to work with/for?
- PhD students are the junior-est of faculty, not the senior-est of students
- What do you want to do *after* the PhD?
- Get a sense of advising styles that fit how you want to work
- Academic = writer. What do you want to write about?