# COMPUTER SCIENCE (GRADUATE FIELD)

Program Website (http://www.cs.cornell.edu/)

## **Field Description**

The Field of Computer Science is intended for students who are primarily interested in the general aspects of computational processes, both theoretical and practical. Areas of research in the field include architecture, artificial intelligence, computational biology, database systems, graphics, human interaction, machine learning, natural language processing, programming languages, robotics, scientific computing, security, systems and networking, theory of computation, and vision.

### **Data and Statistics**

- Research Master's Program Statistics (https:// gradschool.cornell.edu/about/program-metrics-assessmentsand-outcomes/research-masters-program-statistics/? SelectGradField=28)
- Doctoral Program Statistics (https://gradschool.cornell.edu/about/ program-metrics-assessments-and-outcomes/doctoral-programstatistics/?SelectGradField=28)

## Field Manual

Manual (https://www.cs.cornell.edu/phd/current-students/)

Subject and Degrees

#### **Computer Science**

- Computer Science (M.Eng.) (Cornell Tech (NYC)) (https:// catalog.cornell.edu/programs/computer-science-cscn-meng/)
- Computer Science (M.Eng.) (Ithaca)
- Computer Science (M.S.) (Ithaca) (https://catalog.cornell.edu/ programs/computer-science-ms/)
- Computer Science (Ph.D.) (Ithaca) (https://catalog.cornell.edu/ programs/computer-science-phd/)

#### **Robotics**

 Robotics (Ph.D.) (Ithaca) (https://catalog.cornell.edu/programs/ robotics-phd/)

## **Concentrations by Subject**

#### **Computer Science**

- artificial intelligence
- computer science
- programming languages and logics
- scientific computing and applications
- systems
- theory of computation

### Robotics

robotics

## Faculty

Mohamed Abdelfattah (http://tech.cornell.edu/people/mohamed-abdelfattah/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence
- Research Interests: Machine Learning

Jayadev Acharya (http://www.ece.cornell.edu/faculty-directory/jayadev-acharya/)

- · Campus: Ithaca
- **Concentrations:** *Computer Science*: artificial intelligence; theory of computation
- Research Interests: information theory, machine learning, algorithmic statistics

Rachit Agarwal (http://www.cs.cornell.edu/~ragarwal/)

- Campus: Ithaca
- · Concentrations: Computer Science: systems; theory of computation
- Research Interests: distributed systems, systems for big data analytics, networking, design analysis of algorithms

David H. Albonesi (http://www.csl.cornell.edu/~albonesi/)

- · Campus: Ithaca
- · Concentrations: Computer Science: computer science; systems
- Research Interests: computer science; operating systems; information organization and retrieval

Lorenzo Alvisi (http://www.cs.cornell.edu/lorenzo/)

- · Campus: Ithaca
- · Concentrations: Computer Science: computer science; systems
- **Research Interests:** theory and practice of dependable distributed computing

#### Yoav Artzi (http://yoavartzi.com/)

- · Campus: Cornell Tech (NYC)
- Concentrations: Computer Science: artificial intelligence; computer science
- **Research Interests:** I work in the intersection of natural language processing, machine learning, vision, and robotics. My current main research focus is algorithms for natural language understanding with specific interest in situated interactions.

Shiri Azenkot (http://infosci.cornell.edu/content/azenkot/)

- Campus: Cornell Tech (NYC)
- **Concentrations:** *Computer Science*: scientific computing and applications
- · Research Interests: human-computer interactions

Kavita Bala (http://www.cs.cornell.edu/%7Ekb/)

- · Campus: Ithaca
- **Concentrations:** *Computer Science*: artificial intelligence; computer science; programming languages and logics; scientific computing and applications

• **Research Interests:** interactive rendering; global illumination algorithms; image-based modeling and rendering

Siddhartha Banerjee (http://www.engineering.cornell.edu/facultydirectory/sid-banerjee/)

- · Campus: Ithaca
- · Concentrations: Computer Science: theory of computation
- **Research Interests:** Stochastic Modeling, Design of Scalable Algorithms, Matching Markets and Social Computing, Control of Information-Flows, Learning and Recommendation

Christopher Batten (http://www.ece.cornell.edu/faculty-directory/ christopher-batten/)

- · Campus: Ithaca
- · Concentrations: Computer Science: systems
- Research Interests: high performance and energy efficient parallel; computer architecture; VSLI design

Tapomayukh Bhattacharjee (http://www.tapomayukh.com/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; scientific computing and applications; systems
- Research Interests: Artificial Intelligence, Human Interaction, Machine Learning, Robotics

David S. Bindel (http://www.cs.cornell.edu/~bindel/)

- · Campus: Ithaca
- **Concentrations:** *Computer Science*: computer science; scientific computing and applications
- Research Interests: numerical analysis; numerical linear algebra; modeling microelectromechanical systems; numerical software engineering

Kenneth Paul Birman (http://www.cs.cornell.edu/ken/)

- · Campus: Ithaca
- Concentrations: Computer Science: computer science; systems
- **Research Interests:** distributed computing; fault-tolerant network systems; distributed systems security; large-scale network applications

Anne Bracy (http://cs.cornell.edu/~bracy/)

- · Campus: Ithaca (Minor Member)
- · Concentrations: Computer Science: computer science; systems
- · Research Interests: Architecture and VLSI

Florentina Bunea (http://stat.cornell.edu/people/faculty/florentinabunea/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence
- **Research Interests:** Statistical Machine Learning Theory, Statistical Foundations for Data Science, High Dimensional Statistics

Mark Campbell (http://www.engineering.cornell.edu/faculty-directory/ mark-campbell/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence
- Research Interests: robotics, sensor fusion, machine learning and perception

Claire T Cardie (http://infosci.cornell.edu/content/cardie/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; computer science
- Research Interests: natural language processing; machine learning; artificial intelligence

Eshan Chattopadhyay (http://www.cs.cornell.edu/~eshan/)

- · Campus: Ithaca
- · Concentrations: Computer Science: theory of computation
- Research Interests: use of randomness in computation, computational complexity theory and cryptography

Tanzeem Choudhury (http://infosci.cornell.edu/content/choudhury/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; computer science
- Research Interests: systems that can learn how humans behave and interact with their environment and each other

Sanjiban Choudhury (http://robotics.cornell.edu/faculty/sanjibanchoudhury/)

- · Campus: Ithaca
- **Concentrations:** *Computer Science*: artificial intelligence; scientific computing and applications
- · Research Interests: Artificial Intelligence, Machine Learning, Robotics

Michael Ryan Clarkson (http://www.cs.cornell.edu/~clarkson/)

- · Campus: Ithaca (Minor Member)
- Concentrations: Computer Science: programming languages and logics
- · Research Interests: Programming Languages, Security

Alex Conway (http://ajhconway.com/)

- Campus: Ithaca
- · Concentrations: Computer Science: systems; theory of computation
- · Research Interests: algorithms

Anil Damle (http://www.cs.cornell.edu/~damle/)

- · Campus: Ithaca
- Concentrations: Computer Science: computer science; scientific computing and applications
- **Research Interests:** Development of algorithms in applied and computational mathematics (e.g. numerical linear algebra, computational quantum chemistry, and spectral clustering)

Cristian Danescu-Niculescu-Mizil (http://infosci.cornell.edu/content/danescu-niculescu-mizil/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; computer science
- **Research Interests:** Understanding and modeling complex human social behavior using large scale textual data.

Abe Davis (http://www.abedavis.com/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; scientific computing and applications
- Research Interests: computer graphics; computer vision; humancomputer interaction; computational photography

Christopher Matthew De Sa (http://www.engineering.cornell.edu/facultydirectory/chris-de-sa/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; computer science; systems
- **Research Interests:** Developing and understanding algorithmic, software, and hardware techniques for high-performance machine learning

Sarah A Dean (http://sdean.website/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; theory of computation
- Research Interests: Machine Learning, Robotics

Nicola Lee Dell (http://infosci.cornell.edu/content/dell/)

- · Campus: Cornell Tech (NYC)
- Concentrations: Computer Science: artificial intelligence; computer science
- **Research Interests:** human computer interaction(HCI) and information and communication technologies for development with a focus on designing and evaluating systems that improve the lives of underserved populations in low-income regions

Saikat Dutta (http://www.cs.cornell.edu/~saikatd/)

- · Campus: Ithaca
- **Concentrations:** *Computer Science*: programming languages and logics; scientific computing and applications
- · Research Interests: PL, Software engineering

Raaz Dwivedi (http://www.orie.cornell.edu/faculty-directory/raazdwivedi/)

- Campus: Cornell Tech (NYC)
- · Concentrations: Computer Science: artificial intelligence
- Research Interests: Artificial Intelligence

Shimon Edelman (http://shimon-edelman.github.io/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; computer science
- Research Interests: vision; computational biology

Ahmed El Alaoui (http://stat.cornell.edu/people/faculty/ahmed-elalaoui/)

- · Campus: Ithaca
- · Concentrations: Computer Science: theory of computation
- Research Interests: High-dimensional statistics and probability, algorithms, statistical physics

Kevin Michael Ellis (http://www.cs.cornell.edu/~ellisk/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; programming languages and logics
- · Research Interests: Artificial Intelligence, Machine Learning

Hadar Elor (http://www.tech.cornell.edu/people/hadar-averbuch-elor/)

- Campus: Cornell Tech (NYC)
- **Concentrations:** *Computer Science*: artificial intelligence; scientific computing and applications
- · Research Interests: AI, Graphics, Computer vision, Robotics

Deborah Estrin (http://infosci.cornell.edu/content/estrin/)

- Campus: Cornell Tech (NYC)
- · Concentrations: Computer Science: computer science; systems
- Research Interests: mobile systems and applications, participatory sensing, health applications, privacy

Kuan Fang (http://kuanfang.github.io/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; Robotics: robotics
- · Research Interests: Computer Vision, Machine Learning

Silvia Ferrari (http://www.engineering.cornell.edu/faculty-directory/silvia-ferrari/)

- · Campus: Ithaca
- · Concentrations: Computer Science: artificial intelligence
- Research Interests: Distributed systems, computer vision, and robotics

John N. Foster (http://www.cs.cornell.edu/~jnfoster/)

- · Campus: Ithaca
- Concentrations: Computer Science: computer science; programming languages and logics; systems
- Research Interests: intersection between programming languages, databases and formal methods

Sainyam Galhotra (http://sainyamgalhotra.com/)

- · Campus: Ithaca
- · Concentrations: Computer Science: artificial intelligence; systems
- Research Interests: Databases, Responsible Data Science, and Causal Inference

#### Kyra Gan (http://tech.cornell.edu/people/kyra-gan/)

- · Campus: Ithaca
- · Concentrations: Computer Science: artificial intelligence

• Research Interests: artificial intelligence focusing on adaptive trial design (bandit/reinforcement learning), statistical inference, causal discovery, and interpretable LLM

Nikhil Garg (http://tech.cornell.edu/people/nikhil-garg/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; theory of computation
- Research Interests: Mechanism/Market design and data science, with a focus on design of democracy, markets, and other societal systems

Ziv Goldfeld (http://www.ece.cornell.edu/faculty-directory/ziv-goldfeld/)

- · Campus: Ithaca
- · Concentrations: Computer Science: theory of computation
- **Research Interests:** optimal transport theory, statistical machine learning, information theory, high-dimensional statistic, applied probability and interacting particle systems

Paul Leon Gölz (http://paulgoelz.de/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; theory of computation
- Research Interests: Processes for group decision-making that serve the public good

Carla P Gomes (http://infosci.cornell.edu/content/gomes/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; computer science
- · Research Interests: artificial intelligence; computer science

Tanya Goyal (http://tagoyal.github.io/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence
- · Research Interests: AI, Natural Language Processing

Donald P. Greenberg (http://aap.cornell.edu/people/donald-greenberg/? department=8)

- · Campus: Ithaca
- **Concentrations:** *Computer Science*: computer science; scientific computing and applications
- Research Interests: realistic image synthesis; modeling; scientific visualization; computer-aided design; image processing

Giulia Guidi (http://gguidi.com/)

- · Campus: Ithaca
- Concentrations: Computer Science: scientific computing and applications
- Research Interests: Computational Biology, Scientific Computing, systems and Networking

Francois V. Guimbretiere (http://infosci.cornell.edu/content/guimbreti %C3%A8re/)

- · Campus: Ithaca
- Concentrations: Computer Science: computer science; systems
- · Research Interests: systems; computer science

Udit Gupta (http://tech.cornell.edu/people/udit-gupta/)

- · Campus: Ithaca
- Concentrations: Computer Science: systems
- · Research Interests: Systems, Machine Learning

Joseph Yehuda Halpern (http://infosci.cornell.edu/content/halpern/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; computer science; programming languages and logics; theory of computation
- **Research Interests:** logic; artificial intelligence; distributed computing; reasoning about uncertainty

Bharath Hariharan (http://home.bharathh.info/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; computer science; scientific computing and applications
- Research Interests: Rich visual understanding (object recognition, object detection, segmentation and beyond), machine learning (deep learning, convolutional networks)

Haym Hirsh (http://www.cs.cornell.edu/~hirsh/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; computer science
- Research Interests: machine learning;data mining; info retrieval, & AI, esp. targeting questions that integrally involve both people & computing

Guy Hoffman (http://infosci.cornell.edu/content/hoffman/)

- · Campus: Ithaca
- · Concentrations: Computer Science: artificial intelligence
- Research Interests: human-robot interaction, human-robot teamwork and collaboration in particular with respect to interaction fluency

Justin Alpine Hsu (http://www.justinhsu.net/)

- · Campus: Ithaca
- Concentrations: Computer Science: programming languages and logics; theory of computation
- · Research Interests: Programming Languages, Theory of Computing

Thorsten Joachims (http://infosci.cornell.edu/content/joachims/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; computer science
- Research Interests: machine learning; text-mining; statistical learning theory; information access

Wendy Guang-wen Ju (http://infosci.cornell.edu/content/ju/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; scientific computing and applications

• **Research Interests:** Interaction with automation; interaction design research; human robot interaction; automotive interaction design

Ari Juels (http://tech.cornell.edu/people/ari-juels/)

- Campus: Cornell Tech (NYC)
- · Concentrations: Computer Science: systems
- · Research Interests: human interaction, security

Malte Jung (http://infosci.cornell.edu/content/jung/)

- · Campus: Ithaca
- · Concentrations: Computer Science: artificial intelligence
- · Research Interests: robotics

Nathan Kallus (http://www.orie.cornell.edu/faculty-directory/nathan-kallus/)

- Campus: Cornell Tech (NYC)
- · Concentrations: Computer Science: artificial intelligence
- Research Interests: casual inference, machine learning, personalization, optimization in statistics, data-driven optimization under uncertainty, online decision making, decision making and operations in health care

Michael PumShin Kim (http://www.cs.cornell.edu/~mpkim/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; theory of computation
- · Research Interests: Theory of computation

Robert D. Kleinberg (http://infosci.cornell.edu/content/kleinberg-0/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; computer science; theory of computation
- · Research Interests: theory of computation and computer science

Jon M Kleinberg (http://infosci.cornell.edu/content/kleinberg/)

- · Campus: Ithaca
- Concentrations: Computer Science: computer science; theory of computation
- Research Interests: algorithms; combinatorial optimization; computational geometry; computational biology

Allison Koenecke (http://koenecke.infosci.cornell.edu/)

- · Campus: Ithaca
- · Concentrations: Computer Science: artificial intelligence
- · Research Interests: Machine Learning

Hadas Kress-Gazit (http://www.engineering.cornell.edu/faculty-directory/hadas-kress-gazit/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence
- Research Interests: robotics; motion planning; task planning; language for robotics; human-robot interaction

Volodymyr Kuleshov (http://tech.cornell.edu/people/volodymyrkuleshov/)

- · Campus: Ithaca
- **Concentrations:** *Computer Science*: artificial intelligence; scientific computing and applications
- Research Interests: artificial intelligence, machine learning, and computational genomics

Lillian Jane Lee (http://infosci.cornell.edu/content/lee/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; computer science
- · Research Interests: natural language processing

Daniel Dongyuel Lee (http://www.ece.cornell.edu/spotlights/welcomedaniel-lee/)

- Campus: Cornell Tech (NYC)
- Concentrations: Computer Science: artificial intelligence
- Research Interests: machine learning, robotics, computational neuroscience

Owolabi Legunsen (http://www.cs.cornell.edu/)

- · Campus: Ithaca
- Concentrations: Computer Science: programming languages and logics; systems
- Research Interests: software engineering, applied formal methods

Andrea Lodi (http://tech.cornell.edu/people/andrea-lodi/)

- Campus: Cornell Tech (NYC)
- **Concentrations:** *Computer Science:* programming languages and logics; scientific computing and applications
- Research Interests: Programming Languages and Logics, Scientific computing and applications, Data science

Wei-Chiu Ma (http://www.cs.cornell.edu/~weichiu/)

- · Campus: Ithaca
- **Concentrations:** *Computer Science*: artificial intelligence; scientific computing and applications
- · Research Interests: AI, Scientific computing, Vision

Emaad Manzoor (http://emaadmanzoor.com/)

- Campus: Ithaca
- · Concentrations: Computer Science: artificial intelligence
- · Research Interests: machine learning

Stephen Robert Marschner (http://www.cs.cornell.edu/%7Esrm/)

- · Campus: Ithaca
- **Concentrations:** Computer Science: artificial intelligence; computer science; scientific computing and applications
- Research Interests: appearance models for natural materials; 3D scanning; processing scanned geometric data; image-based appearance measurements for 3D objects

Jose Martinez (http://www.ece.cornell.edu/faculty-directory/jose-f-martinez/)

- · Campus: Ithaca
- · Concentrations: Computer Science: computer science; systems

• **Research Interests:** multithreaded and multiprocessor architectures for high performance and programmability; microarchitecture; hardware-software interaction

David Matteson (http://www.stat.cornell.edu/~matteson/)

- · Campus: Ithaca
- · Concentrations: Computer Science: artificial intelligence
- Research Interests: Mathematical Foundations of Data Science, Data Science in Science, Machine Learning

David Mimno (http://infosci.cornell.edu/content/mimno/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; computer science
- · Research Interests: Machine learning, text mining, digital humanities

Kristina Monakhova (http://kristinamonakhova.com/kristina/)

- · Campus: Ithaca
- · Concentrations: Computer Science: artificial intelligence
- Research Interests: Artificial Intelligence, Computational Biology, Machine Learning, Vision

John Gregory Morrisett (http://kristinamonakhova.com/kristina/)

- · Campus: Cornell Tech (NYC)
- Concentrations: Computer Science: computer science; programming languages and logics; systems
- Research Interests: programming languages; compilers; distributed systems; runtime systems

Andrew C Myers (http://www.engineering.cornell.edu/faculty-directory/ andrew-c-myers/)

- · Campus: Ithaca
- Concentrations: Computer Science: computer science; programming languages and logics; systems
- · Research Interests: programming languages

Mor Naaman (http://infosci.cornell.edu/content/naaman/)

- · Campus: Ithaca
- · Concentrations: Computer Science: systems
- Research Interests: Social media, data mining, human-computer interaction, computational social science, interactive systems

Rajalakshmi Nandakumar (http://infosci.cornell.edu/content/ nandakumar/)

- Campus: Ithaca
- · Concentrations: Computer Science: systems
- **Research Interests:** wireless networking, Mobile Systems and Mobile Health.

Anil Nerode (http://www.mathlab.cornell.edu/m/People/bynetid/an17/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; computer science; programming languages and logics; systems; theory of computation
- Research Interests: logic; applied mathematics

Tapan Suryakant Parikh (http://infosci.cornell.edu/content/parikh/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; systems
- Research Interests: human-computer interaction; information and communication technologies for development; computer science education

Francesca Parise (http://www.engineering.cornell.edu/faculty-directory/ francesca-parise/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; theory of computation
- Research Interests: Theory of Computing, Artificial Intelligence

Rafael N. Pass (http://www.cs.cornell.edu/%7Erafael/)

- Campus: Cornell Tech (NYC)
- **Concentrations:** *Computer Science*: artificial intelligence; theory of computation
- · Research Interests: theory; computer science

Kirstin Hagelskjaer Petersen (http://www.ece.cornell.edu/facultydirectory/kirstin-hagelskjaer-petersen/)

- · Campus: Ithaca
- · Concentrations: Computer Science: artificial intelligence
- **Research Interests:** design and coordination of bio-inspired robot collectives and their natural counterparts

Emma Pierson (http://www.dli.tech.cornell.edu/members/Pierson/)

- Campus: Cornell Tech (NYC)
- · Concentrations: Computer Science: artificial intelligence
- · Research Interests: Machine Learning

Thomas Ristenpart (http://rist.tech.cornell.edu/)

- Campus: Cornell Tech (NYC)
- Concentrations: Computer Science: computer science; systems; theory of computation
- Research Interests: Software Security, applied and theoretical cryptography

Thijs Jan Roumen (http://infosci.cornell.edu/content/roumen/)

- · Campus: Ithaca
- · Concentrations: Computer Science: systems
- Research Interests: Digital Fabrication, Human-Computer Interaction

Alexander Matthew Rush (http://tech.cornell.edu/people/alexanderrush/)

- Campus: Cornell Tech (NYC)
- · Concentrations: Computer Science: artificial intelligence
- Research Interests: natural language processing, machine learning

Mert Sabuncu (http://sabuncu.engineering.cornell.edu/)

- · Campus: Ithaca
- · Concentrations: Computer Science: artificial intelligence
- Research Interests: computer vision, data mining, machine learning

Adrian Lewis Dequine Sampson (http://www.engineering.cornell.edu/ faculty-directory/adrian-sampson/)

- · Campus: Ithaca
- Concentrations: Computer Science: programming languages and logics; systems
- Research Interests: hardware-software abstractions, including computer architecture, compilers, software engineering

Fred Barry Schneider (http://infosci.cornell.edu/content/schneider/)

- · Campus: Ithaca
- Concentrations: Computer Science: computer science; programming languages and logics; systems
- Research Interests: distributed systems security and fault-tolerance; mobile code; concurrent programming; operating systems

Ziv Scully (http://www.orie.cornell.edu/faculty-directory/ziv-scully/)

- · Campus: Ithaca
- · Concentrations: Computer Science: theory of computation
- · Research Interests: Theory of Computation

Bart Selman (http://www.cs.cornell.edu/selman/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; computer science
- Research Interests: artificial intelligence and experimental computer science

Phoebe J Sengers (http://infosci.cornell.edu/content/sengers/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; computer science
- Research Interests: culturally embedded computing; humancomputer interaction; everyday computing; affective computing; interactive art; autonomous agents

Vitaly Shmatikov (http://www.cs.cornell.edu/~shmat/)

- · Campus: Cornell Tech (NYC)
- Concentrations: Computer Science: artificial intelligence; computer science; systems
- · Research Interests: computer security and privacy

David B Shmoys (http://infosci.cornell.edu/content/shmoys/)

- · Campus: Ithaca
- Concentrations: Computer Science: computer science; scientific computing and applications; theory of computation
- · Research Interests: scheduling; computational complexity

Alexandra Silva (http://alexandrasilva.org/#/mainhtml)

- · Campus: Ithaca
- Concentrations: Computer Science: programming languages and logics; theory of computation
- · Research Interests: Programming Languages, Theory of Computing

Rachee Singh (http://cis.cornell.edu/three-new-faculty-members-joincornell-bowers-cis/)

- · Campus: Ithaca
- Concentrations: Computer Science: systems
- · Research Interests: Security, Systems and networking

Keith N. Snavely (http://www.cs.cornell.edu/~snavely/)

- Campus: Cornell Tech (NYC)
- Concentrations: Computer Science: artificial intelligence; computer science; scientific computing and applications
- Research Interests: computer graphics; computer vision

Nicholas Perry Spooner (http://spooner.cc/)

- · Campus: Ithaca
- · Concentrations: Computer Science: theory of computation
- · Research Interests: Security, theory

Karthik Sridharan (http://www.cs.cornell.edu/~sridharan/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; computer science; theory of computation
- **Research Interests:** Machine Learning, Statistical Learning Theory, Online Learning and Decision Making, Optimization, Empirical Process Theory, Concentration Inequalities, Game Theory

Noah Stephens-Davidowitz (http://noahsd.com/)

- · Campus: Ithaca
- · Concentrations: Computer Science: theory of computation
- Research Interests: lattices, cryptography, and theoretical computer science more broadly

Wen Sun (http://www.cs.cornell.edu/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; theory of computation
- Research Interests: machine learning, reinforcement learning, decision making under uncertainty

Jennifer J. Sun (http://jenjsun.com/)

- · Campus: Ithaca
- · Concentrations: Computer Science: artificial intelligence
- · Research Interests: AI, Machine Learning, Vision

Ao Tang (http://www.ece.cornell.edu/faculty-directory/kevin-tang/)

- · Campus: Ithaca
- · Concentrations: Computer Science: systems; theory of computation
- Research Interests: computer networks; large-scale complex networks; stochastic networks and processes; optimization theory; control theory and applications; game theory

Eva Tardos (http://infosci.cornell.edu/content/tardos/)

- · Campus: Ithaca
- Concentrations: Computer Science: computer science; theory of computation
- Research Interests: combinatorics; complexity theory; communication networks; QoS and data flow

Angelique Marie Taylor (http://tech.cornell.edu/people/angelique-taylor/)

- · Campus: Cornell Tech (NYC)
- Concentrations: Computer Science: artificial intelligence
- Research Interests: Robotics, Artificial Intelligence

John Thickstun (http://johnthickstun.com/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence
- Research Interests: AI, Natural Language Processing, Machine Learning

Alex John Townsend (http://math.cornell.edu/alex-townsend/)

- · Campus: Ithaca
- **Concentrations:** Computer Science: scientific computing and applications
- · Research Interests: Scientific Computing

Immanuel Trummer (http://as.cornell.edu/people/immanuel-trummer/)

- · Campus: Ithaca
- Concentrations: Computer Science: systems
- · Research Interests: databases; data science; optimization

Robbert Van Renesse (http://www.cs.cornell.edu/home/rvr/)

- · Campus: Ithaca
- · Concentrations: Computer Science: computer science; systems
- Research Interests: distributed computing; fault-tolerance; distributed multimedia systems

Marten van Schijndel (http://vansky.github.io/)

- Campus: Ithaca
- · Concentrations: Computer Science: artificial intelligence
- Research Interests: natural language processing, machine learning, cognitive modeling

Anke van Zuylen (http://www.cs.cornell.edu/people/faculty/)

- Campus: Ithaca (Minor Member)
- · Concentrations: Computer Science: theory of computation
- **Research Interests:** design and analysis of algorithms, combinatorial optimization, polyhedral combinatorics

Aditya Vashistha (http://adityavashistha.com/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence
- Research Interests: Artificial Intelligence, Human-computer interaction

Aaron B. Wagner (http://www.ece.cornell.edu/faculty-directory/aaron-b-wagner/)

- · Campus: Ithaca
- Concentrations: Computer Science: theory of computation
- **Research Interests:** information theory especially compression, feedback communication, security and quantum information

Fei Wang (http://weill.cornell.edu/faculty-highlight/fei-wang-phd/)

- Campus: Cornell Tech (NYC)
- Concentrations: Computer Science: artificial intelligence
- Research Interests: data mining, machine learning, health data science

Jianxun Wang (http://prod.cs.cornell.edu/content/wang-49/)

- Campus: Ithaca
- · Concentrations: Computer Science: artificial intelligence
- Research Interests: Artificial Intelligence

Hakim Weatherspoon (http://www.engineering.cornell.edu/facultydirectory/hakim-weatherspoon/)

- · Campus: Ithaca
- · Concentrations: Computer Science: systems
- Research Interests: information systems; distributed systems; network systems; peer-to-peer systems

Kilian Quirin Weinberger (http://www.cs.cornell.edu/~kilian/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; computer science
- Research Interests: Machine Learning: high dimensional data analysis, machine learned web-search ranking, sentiment analysis, metric learning, multitask- and transfer-learning settings and biomedical applications

Mark McMahon Wilde (http://www.ece.cornell.edu/faculty-directory/ mark-wilde/)

- · Campus: Ithaca
- · Concentrations: Computer Science: theory of computation
- · Research Interests: Quantum computation

David Paul Williamson (http://infosci.cornell.edu/content/williamson/)

- · Campus: Ithaca
- Concentrations: Computer Science: computer science; theory of computation
- Research Interests: algorithms; combinatorial optimization; computer science

Qian Yang (http://infosci.cornell.edu/content/yang-0/)

- · Campus: Ithaca
- **Concentrations:** *Computer Science*: artificial intelligence; scientific computing and applications
- Research Interests: Artificial Intelligence and Scientific Computing and Applications

Yunan Yang (http://as.cornell.edu/people/yunan-yang/)

- · Campus: Ithaca
- **Concentrations:** *Computer Science:* scientific computing and applications
- Research Interests: Scientific Computing and applications, Machine Learning, Al

Fengqi You (http://www.atkinson.cornell.edu/about/people/fellows/ view.php?NetID=fy86)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence; theory of computation
- · Research Interests: theory of computation

Haiyuan Yu (http://www.atkinson.cornell.edu/about/people/fellows/ view.php?NetID=fy86)

- · Campus: Ithaca
- Concentrations: Computer Science: scientific computing and applications

Christina Lee Yu (http://www.orie.cornell.edu/faculty-directory/christina-lee-yu/)

- · Campus: Ithaca
- · Concentrations: Computer Science: theory of computation
- **Research Interests:** theory of computing, artificial intelligence (machine learning), scientific computing

Ramin Zabih (http://infosci.cornell.edu/content/zabih/)

- Campus: Cornell Tech (NYC)
- Concentrations: Computer Science: artificial intelligence; computer science; theory of computation
- · Research Interests: computer vision

Cheng Zhang (http://infosci.cornell.edu/content/zhang-0/)

- · Campus: Ithaca
- Concentrations: Computer Science: artificial intelligence
- Research Interests: ubiquitous computing, wearable computing, human computer interaction

Zhiru Zhang (http://www.ece.cornell.edu/faculty-directory/zhiru-zhang/)

- · Campus: Ithaca
- · Concentrations: Computer Science: systems
- Research Interests: computer-aided design methodologies, optimization algorithms, compilers & computer architectures of gigascale integrated systems, esp. systems-on-chips