



## OVERVIEW

The Computer Science and Informatics Ph.D. program focuses on emerging, interdisciplinary areas of computing research with a curriculum grounded in core areas of algorithms, data and systems. It is unique for its integration of collaborative opportunities, as part of its graduate training, with Emory Schools of Medicine, Public Health, Center for Comprehensive Informatics, the Woodruff Library and the Centers for Disease Control and Prevention.

## FACULTY AND RESEARCH

- Eugene Agichtein**, Ph.D. *Columbia, 2005*  
information retrieval; text and data mining
- Michele Benzi**, Ph.D. *NC State, 1993*  
numerical linear algebra, Markov chains
- Shun Yan Cheung**, Ph.D. *Georgia Tech, 1990*  
networking; performance evaluation
- Michelangelo Grigni**, Ph.D. *MIT, 1991*  
complexity theory; approximation algorithms
- James J. Lu**, Ph.D. *Northwestern, 1992*  
constraint processing; data integration
- Ken Mandelberg**, Ph.D. *Cornell, 1973*  
operating systems; graphics
- James Nagy**, Ph.D. *NC State, 1991*  
scientific computing; image restoration
- Joel Saltz**, M.D., Ph.D. *Duke, 1985*  
biomedical informatics; computational grids
- Joan Smith**, Ph.D. *Old Dominion, 2008*  
digital preservation; web harvesting
- Vaidy Sunderam**, Ph.D. *Kent (England), 1986*  
parallel and high-performance computing
- James Taylor**, Ph.D. *Penn State, 2006*  
computational biology; genomics; machine learning
- Alessandro Veneziani**, Ph.D. *Milan (Italy), 1998*  
computational mathematics and fluid dynamics
- Li Xiong**, Ph.D. *Georgia Tech, 2005*  
data privacy and security; data management

## RECENT HIGHLIGHTS

- ♠ Eugene Agichtein wins HP, Cisco, Yahoo awards to study information seeking and sharing in social media.
- ♠ Li Xiong is one of 20 recipients of the 2009 Woodrow Wilson Career Enhancement Fellowship.
- ♠ Ph.D. students Qi Quo and Yandong Liu win two of 20 awards in Yahoo!'s Key Scientific Challenges.
- ♠ James Taylor is recognized by Genomic Technology as one of 30 rising stars in genomics research.

## Additional Information:

Math/CS Homepage: <http://www.mathcs.emory.edu>  
 Graduate School: <http://www.graduateschool.emory.edu>  
 Emory University: <http://www.emory.edu>

## DEGREE REQUIREMENTS

**Course Requirements:** 10 courses and 2 projects

Core courses are in Algorithms, Data Management and Systems. Electives may be taken from relevant courses within Math & CS, the Natural Science departments, the schools of Medicine, Public Health, and Business.

Projects are faculty-lead and aim to 1) provide practicum opportunities, 2) explore potential dissertation topics within the faculty advisor's area, 3) expose students to computational research problems in practical settings through interdisciplinary collaborations.

**Qualifying Examination:** There are two parts: an area exam that covers foundational materials within the student's area of research, and a thesis proposal in which the student describes a set of open research questions and the approaches that will be taken to answer them.

**Teaching Requirements:** As part of the preparation for possible academic careers, each student will attend a three-day summer workshop and a one semester department seminar on teaching, co-teach one course, and independently teach one introductory-level undergraduate course.

**Dissertation and Defense:** Each student will complete and defend a dissertation that describes the results of the student's original research.

## FINANCES

Each admitted student is eligible to receive a full-tuition waiver for the duration of their study and 2-3 years of stipend support provided that the student makes satisfactory progress in his/her study. Stipend may come in the form of research and teaching assistantships or fellowships. The level of support is based on qualification (prior to entering the program) and performance (after matriculation). Special fellowships and professional development support funds are available on a competitive basis.

## APPLICATION

A complete application includes the application form, official transcripts (from current and all previous institutions attended), three letters of recommendations, official GRE scores (general exam), and financial certification (for international students). Submit online:

<http://www.gs.emory.edu/admissions/application.php>

The application deadline is **JANUARY 15**.