2014-15
www.cs.purdue.edu
Courtesy Voicu Popescu

Lawson Computer Science Building

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Lawson Commons

The Lawson building was developed with multiple spaces designed to foster collaboration and dialogue.

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CS Social Hour

Students, faculty and staff meet weekly during the CS social hour.

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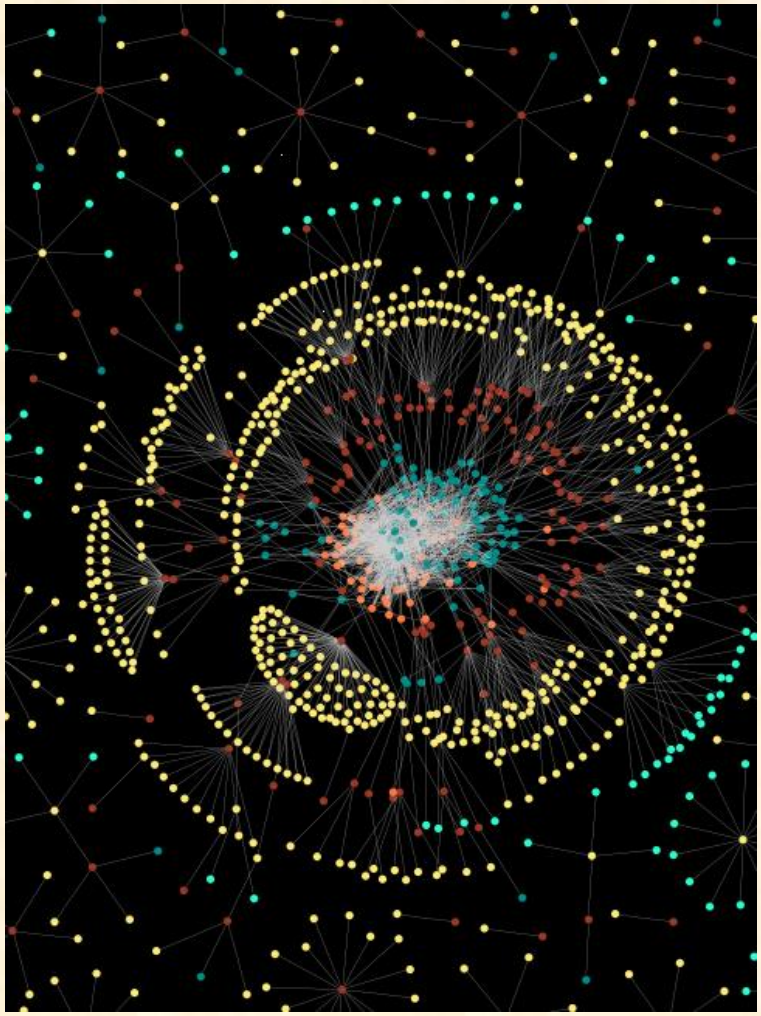
Research

It's Happening Here!

- Big Data
- Biological Databases
- Cloud Computing
- Complexity Theory
- Concurrent Programming
- Data Mining
- Embedded Systems
- Information Retrieval
- Information Visualization
- Multi-Core Architectures
- Online Privacy
- Sensor Networks



Faculty Fall 2014

47 Graduate Faculty:

- 29 Full Professors
- 13 Associate Professors
- 5 Assistant Professors

Multidisciplinary Efforts

Our faculty play a leading role in:

- Center for Education and Research in Information Assurance and Security (CERIAS)
  Eugene Spafford, Executive Director
- Center for Science of Information (CSOI)
  Wojciech Szpankowski, Director
- Combinatorial Scientific Computing and Petascale Simulations (CSCAPES)
  Alex Pothen, Director
- Cyber Center (Discovery Park)
  Elisa Bertino, Director
- Indiana Center for Database Systems (ICDS)
  Ahmed Elmagarmid, Founding Director
  Chris Clifton, Director

CS Students Fall 2014

270 Graduate Students

- 31% past Qualifying Exams
- 16% Women
- 74% International Students

CS Degrees Awarded in 2013-2014

38 M.S.

18 Ph.D.

Where our Grads went 2013-14

- Google (9)
- Purdue University (2)
- Acelio
- Amazon
- eFolder
- Facebook
- IBM Research
- Intel
- Lawrence Berkeley National Laboratory
- Miami University
- Microsemi Corporation
- Pennsylvania State University
- Simon Fraser University
- Symantec
- Synopsys
- TellApart
- Turn
- University of Waterloo
- VMware

Financial Support Fall 2014

- **98 Graduate RAs in CS**
- **77 Graduate TAs in CS**
- **18 Graduate Fellows**

Financial Support Fall 2014

- **Tuition and fees for graduate assistants and fellows is about $606 per academic year.**
- **International students pay an additional $160.**
- **Salary for graduate assistants starts at $16,146 per academic year.**
- **Medical insurance for graduate assistants is approximately $461 per year. Purdue also contributes to the healthcare costs of fellows and dependents of graduate assistance.**

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Graduate Student Board

Graduate Student Board

The Graduate Student Board (GSB) is a link between CS graduate students, faculty, and administration.

The GSB's goals are:

- **help incoming students**
- **suggest ways of improving the program**
- **participate in decisions in various committees**
- **administer travel grants for grad students**
- **promote social activities**

www.cs.purdue.edu/gsb/

Corporate Partners Program

The program fosters communications and mutually beneficial relationships between select companies and the department:

- **Fellowships**
- **Posting of Positions by Companies**
- **CS Career Fair**
- **Technical Talks**
- **CPP meetings Fall and Spring**

Corporate Partners Program

Corporate Partners especially interested in hiring PhD Students in 2014-2015:

Allston Trading	Hulu
Amazon	Humana
Bloomberg	Informatica
Booz Allen Hamilton	Intel
Chicago Trading Company	Interactive Intelligence
CyberMetrix	Northrop Grumman
Enova	Qualcomm
Epic	Sandia National Laboratories
ExactTarget	Sears Holdings
Facebook	VMware, Inc.
Fluke Networks	Yelp, Inc.
Google	

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CELEBRATING 50 YEARS OF COMPUTER SCIENCE

FALL 2012 SAMUEL D. CONTE DISTINGUISHED LECTURE SERIES

Dr. C. Mohan, IBM Research - Almaden
"Implications of Storage Class Memories on Software and Hardware Architectures"
Friday, August 31, 2012
3:30 p.m.

Prof. John Hopcroft, Cornell University
"New Directions in Computer Science"
Friday, September 21, 2012
3:30 p.m.

Dr. Iain Duff, Rutherford Appleton Laboratory & CERFACS
"Solving Large Sparse Linear Systems: The Exascale Challenge"
Thursday, November 1, 2012
3:30 p.m.

Prof. Tom Mitchell, Carnegie Mellon University
"Never Ending Learning"
Thursday, November 15, 2012
3:30 p.m.

Each lecture will take place in the Lawson Computer Science Building Room 1142 with a reception to follow.

All lectures and receptions are free, open to the public, and sponsored by the Department of Computer Science.

This special 50th Anniversary lecture series will continue in Spring 2013. See 50th.cs.purdue.edu for details.

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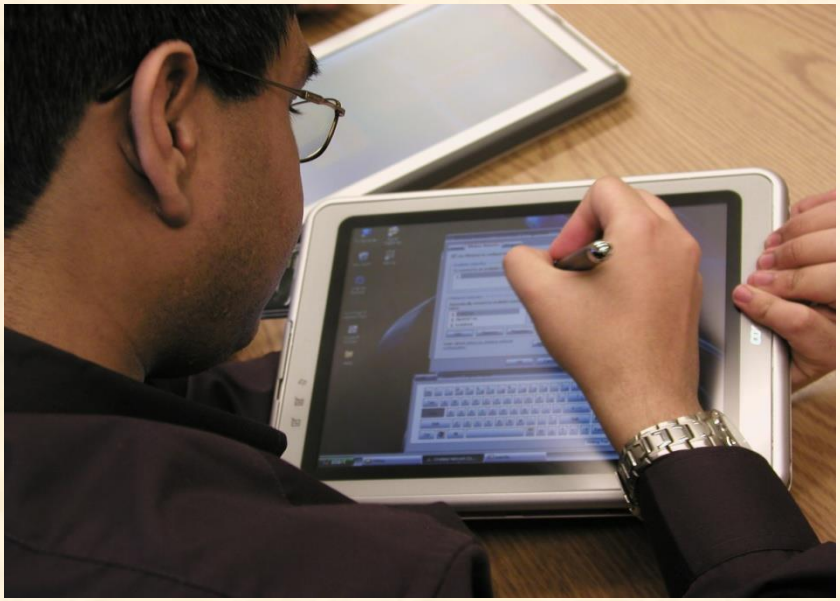
Facilities



- Access to the NSF TeraGrid
- 3D graphics and high resolution displays
- Gigabit wired connections, as well as wireless and mobile networks
- Multiple compute clusters
- Workstations with 60 terabytes of storage capabilities

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Instructional Lab

Teamwork is an integral part of computing—and Purdue Computer Science is creating innovative instructional laboratories that support team projects.

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CS Graduate Curriculum

- **Master's Program (also online)**
- **Doctoral Program**
- **Multidisciplinary Programs**
  - Computational Science and Engineering
  - Computational Life Sciences
  - Statistics-Computer Science Joint Masters

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CS Graduate Curriculum

Master's Program

- ten three credit courses or
- eight three credit courses and a thesis

Doctoral Program

- three research courses
- nine three-credit courses
- a qualifying process involving four written examinations and an oral examination
- a preliminary examination
- a thesis

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Computational Life Sciences

- an interdisciplinary graduate program
- offers M.S. and Ph.D. degrees
- aims to produce students who have learned about computational tools and techniques in the life sciences. These skills, in turn, will help prepare them for discovery and implementation of algorithms that facilitate the understanding of biological processes.

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Computational Science & Engineering

- an interdisciplinary graduate program
- offers M.S. and Ph.D. degrees
- provides students with the opportunity to study a specific science or engineering discipline along with computing in a multidisciplinary environment.

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CS and ECE Interactions

- Joint supervision of graduate students
- Courtesy appointments for faculty
- Cross listed courses
- Joint research projects
- Complementary research in networking and compilers
- Computer Engineering covers:
  - Architecture
  - Artificial Intelligence
  - Image Processing
  - Vision

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West Lafayette Campus

Location

- in West Lafayette, Indiana
- on the Wabash River
- across from Lafayette
- 122 miles SE of Chicago
- 65 miles NW of Indianapolis

Fall 2013 Facts about Purdue

- Public, doctoral-granting research university
- 1,820 Tenured/Tenure-Track Faculty
- 29,440 Undergraduate Students
- 8,407 Graduate Students
- 37.4 % Graduate Women
- 123 Countries (entire student body)

Student Groups

- Over 600 Student Organizations
- Purdue Student Union Board
- Purdue Graduate Student Government

Cultural Life

- Black Cultural Center performing ensembles
- Purdue Convocations
- Purdue Repertory Dance Company
- Purdue Symphony Orchestra
- Purdue Theatre
- Purdue University Bands

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Big Ten Athletics

Division I NCAA Sports

- **Football**
- **Basketball**
- **Volleyball**

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Admission

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Admission Criteria

- CS course background
- GPA
- Letters of recommendation
- Research experience and publications
- Statement of purpose

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Admission Requirements

- **Familiarity with data structures and their implementations in different languages**
- **An understanding of computer architecture, compilers, operating systems, the analysis of algorithms, networks, and programming languages**
- **Knowledge of mathematics through differential equations, linear and matrix algebra, and numerical methods.**
- **Proficiency in a programming language such as Java, C, or C++.**

Application Steps

Fall Deadline is December 15

- **submit an Electronic Graduate School Application**
- **ask your references to submit Letters of Recommendation**
- **ask the registrar to submit to us your Transcripts**
- **submit TOEFL, TWE and TSE scores, if required**
- **pay the Application Fee**

Grad School? Why?

Because…

- **The knowledge base of a graduate education is becoming increasingly valuable.**
- **A graduate education**
  - **gives access to more career opportunities and more interesting jobs**
  - **translates to jobs generally unlikely to face global outsourcing**
  - **provides more flexibility to shift between projects and assignments**
  - **allows for better career advancement**