2016-17
www.cs.purdue.edu

Courtesy Voicu Popescu
Lawson Computer Science Building
The Lawson building was developed with multiple spaces designed to foster collaboration and dialogue.
Students, faculty and staff meet weekly during the CS social hour.
It’s Happening Here!

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

- 29 Full Professors
- 9 Associate Professors
- 16 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)
  Primary Committee: Elisa Bertino, Susanne Hambrusch, Chris Hofmann

- **Indiana Center for Database Systems (ICDS)**
  Chris Clifton, Director
345 Graduate Students

- 220 with doctoral objective (64%)
- 70 Women (20%)
- 279 International Students (82%)
CS Degrees Awarded in 2015-2016

59 M.S.
15 Ph.D.
Where our recent Grads went

• Google
• Purdue University
• Microsoft
• Bloomberg
• Facebook
• Amazon
• IBM
• Intel
• Qualcomm
• Acelio
• Apple
• Barefoot Networks
• Claudera
• eFolder
• EMC
• Epic
• foursquare
• HP Labs
• Kidaptive
• King Saud University
• Lawrence Berkeley National Laboratory
• Miami University
• Microsemi Corporation
• Oracle
• Palo Alto Research Center (Xerox)
• Pennsylvania State University
• Pixar
• Razorfish Platforms
• Sandia National Laboratories
• Santa Clara University
• Simon Fraser University
• Symantec
• Synopsys
• Sypris Electronics
• Technicolor Research Lab
• TellApart
• Texas A&M University
• Turn
• University of Waterloo
• Vmware
• Yahoo
Financial Support Fall 2016

- 118 Graduate RAs in CS
- 98 Graduate TAs in CS
- 17 Graduate Fellows
Financial Support Fall 2016

• Tuition is remitted for graduate assistants and fellows. Some fees still need to be paid of about $1730 per academic year.

• International students pay an additional $160.

• Salary for graduate assistants starts at $17,900 per academic year.

• Medical insurance for graduate assistants is approximately $508 per year. Purdue also contributes to the healthcare costs of fellows and dependents of graduate assistance.
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 2016-2017:

<table>
<thead>
<tr>
<th>Angie’s List</th>
<th>Monsanto</th>
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</thead>
<tbody>
<tr>
<td>Bloomberg</td>
<td>National Security Agency</td>
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<tr>
<td>Boeing</td>
<td>Qualcomm</td>
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<tr>
<td>General Motors</td>
<td>Sandia National Laboratories</td>
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<td>Harris Corporation</td>
<td>Sears Holdings</td>
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<td>IBM</td>
<td>Spensa Technologies</td>
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<td>Intel</td>
<td>Walmart</td>
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<td>Interactive Intelligence</td>
<td>Yahoo</td>
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<tr>
<td>Milliman PRM Analytics</td>
<td>Yelp, Inc.</td>
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</tbody>
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Purdue University

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

• Professional MS in Information Security

• Master’s Program (on campus or distance)

• Doctoral Program

• Multidisciplinary Programs
  – Computational Science and Engineering
  – Computational Life Sciences
  – Statistics-Computer Science Joint Masters
Professional Master’s Degree in Information Security

- for IT professionals in industry or government who want to advance in technical security and privacy positions
- Flexibility in course selection allows specialization
- program can be completed in one calendar year
- Summer is start term
- 30 credits
CS Graduate Curriculum

Master’s Program
• 10 three-credit courses
or
• 8 three-credit courses and a thesis

Doctoral Program
• 3 research courses
• 6 three-credit courses
• core course requirement and research
• preliminary examination
• thesis
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.
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.
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
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
2013-14 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
Big Ten Athletics

Division I NCAA Sports

- Football
- Basketball
- Volleyball
Admission
Admission Criteria

- CS course background
- GPA
- Letters of recommendation
- Research experience and publications
- Statement of purpose
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 20

- submit an Electronic Graduate School Application
- ask your references to submit Letters of Recommendation
- Upload scans of official 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