Facilities Overview

The Computer Science Department is dedicated to providing high-quality computing facilities for use by computer science faculty, students, and administrative personnel. The facilities are operated by Department and College of Science technical staff who are not only responsible for the installation, repairs, and maintenance of the systems, but who also assist faculty and students with equipment acquisitions and support for instructional and research projects.

General Facilities

General Department computing facilities are available for both administrative activities (such as the preparation of research reports and technical publications) and research needs that are not supported by other dedicated equipment. The main server systems are multi-core multiprocessors with large main memories and large disk arrays for storage. A variety of workstations and laptops are used by faculty, staff, and students throughout the Department. The Department has also purchased compute nodes in the Hammer, Rice and Snyder supercomputing clusters and terabytes of storage space in the SAN managed by the central research IT service on campus (RCAC). These resources are available to all Department researchers, and additional nodes/storage are available for individual purchase.

Instructional Facilities

The Department operates eight instructional laboratories for both undergraduate and graduate Computer Science courses. They include over 200 X86-based workstations running Linux and Windows. Two of the labs are collaborative labs dedicated to group learning with the assistance of interactive technology. The devices instructional lab includes a locker system that allows convenient access for students to a number of devices such as the latest Raspberry Pi technology, Oculus Rift VR goggles, Parrot Drones, and Leap Motion controllers. This lab is open to CS students and student groups for experimentation with some of the latest technology. The new (spring 2016) graphics lab includes workstations with Nvidia GTX 970 GPUs to support CUDA development in CS graphics courses.

I/O Equipment

The Department operates more than 60 laser printers, eight of which are multi-function. There are 10 conference rooms with 80” displays, and video and audio conferencing equipment. The Department also has mobile video conferencing stations and digital video cameras. The main atrium of the building features a 184” video wall for educational, informative and recreational use.

Networking Services

The Department has state-of-the-art networking technology to provide access to systems in the department, across campus, and throughout the world. All desktop connections are 1Gbps. The core infrastructure is 10 Gbps and the wiring in the Lawson Computer Science building supports 10Gbps to the desktop. There are over 75 Ethernet VLAN-capable switches from Dell, Force10, and Cisco Systems. This network infrastructure is connected to the campus backbone by redundant fiber links. The campus is connected to multiple high speed Internet backbones, including Abilene/Internet2 and I-Light. DSL, cable, fiber, and cellular data services are available in the community for remote access from home.

Information Technology at Purdue (ITaP)

ITaP, the central campus IT group, supports general instructional labs, wireless networking, and presentation facilities in classrooms. ITaP’s Research Computing (RCAC) group also maintains multiple supercomputing clusters and large storage area networks for course and research computing.