

COMPUTING

Departmental Facilities

The School of Computing graduate facilities consist of network of Macs, PCs, SGI and Sun workstations with the main infrastructure supported by Sun servers. The School's network of 100 computers support the research laboratories in the fields of study described below. The laboratories contain specialized equipment such as audio and video equipment, robotic equipment, eye tracking equipment, ultra sound machine and tracking systems for surgical tools. Undergraduate teaching facilities include four laboratories with 175 PCs supporting a Win XP and Linux environment, 24 Sun workstations and Sun servers for the main infrastructure. There is a Human Media laboratory consisting of five Macs with tablets and digital video cameras.

Graduate Student Support

For information concerning financial aid, students are advised to consult with the School of Computing or the School of Graduate Studies.

Fields of Study

The school's research and course offerings emphasize three broad areas of computing science:

1. **Computer Systems:** including the topics of computer architecture, software engineering, design and implementation of programming languages, operating systems, program verification and analysis, the software/hardware interface, computer networks, distributed systems, data security, and Grids. The ULSS graduate stream (Ultra-Large-Scale Software Systems) is part of the Computer Systems field.
2. **Theory of Computation:** including the topics of computability, complexity of computations, algorithm design and analysis, parallel computation, graph theory, computational geometry, array theory, theory of programming languages, logic, cryptology, Formal Methods.
3. **Applications:** including the topics of information storage and retrieval, database organization and management, management information systems, computer-assisted surgery, computer vision, biomedical computing, human-computer interaction, artificial intelligence, cognitive science, object editing, graphics, image processing, music, bioinformatics, molecular scene analysis, pattern recognition and Data and Text Mining.

Programs of Admission

Applicants are admitted in accordance with the general regulations of the School of Graduate Studies.