



COMPUTER SCIENCE (PHD)

The School of Computing aims to increase graduate students' breadth of knowledge and develop depth of expertise in a subfield of computer science and engineering.

Description

The School of Computing offers opportunities for students to develop teaching skills in support of undergraduate instruction and to enhance research skills in support of the department's active research programs. The goal is to build a foundation for future scientific discovery, engineering innovation, and scholarly and professional achievement.

Areas of research include:

- **Informatics and Algorithmics Foundations:** Algorithms; artificial intelligence; bioinformatics; computational complexity; computational game theory; computer vision; computing education; constraint processing; data mining; databases; geoinformatics; machine learning; multiagent systems; simulation and modeling; and visualization.
- **Software Engineering:** Eye tracking; empirical software engineering; program analysis and verification; programming languages; and software testing and reliability.
- **Systems and Networking:** Computer networks; cyber-physical systems; wireless networking; Internet of Things; molecular communication; synthetic biology; deep learning architectures; security and privacy; robotics; embedded systems; sensors and sensor networks.

The School of Computing is home to advanced computing research infrastructure, including the Holland Computing Center, with over 121 trillion floating-point operations per second (121 TFlops) computation rate and over 7 petabytes of storage. Graduate students have access to state-of-the-art research facilities, including unmanned aerial vehicle testbeds, a city-wide gigabit wireless network testbed, advanced embedded systems facilities, and dedicated research labs.

Specializations

- Bioinformatics

Program-Related Information

Graduate Chair

M. Can Vuran
402-472-5019
mcv@unl.edu

Support Staff

Tori Kimminau
402-472-5001
tori.kimminau@unl.edu

Program Website

<https://computing.unl.edu/phd-computer-science/>

Applying for Admission

Standard requirements for all graduate programs

- Application for Admission with \$50 non-refundable application fee (<https://graduate.unl.edu/admissions/requirements/#appfee>).
- Transcripts (<https://graduate.unl.edu/admissions/requirements/#transcripts>) (unofficial): Uploaded as part of application form.
If International: Uploads must include all college- or university-level transcripts or mark sheets (records of courses and marks earned), with certificates, diplomas, and degrees plus certified English translations.

After admission: Official documents are required from all students who are admitted and enroll. Photocopies of certified records are not acceptable. International students enrolled in other U.S. institutions may have certified copies of all foreign records sent directly to the Office of Graduate Studies by their current school's registrar office.

- If applicant's native language is not English, verification of English proficiency (<https://graduate.unl.edu/admissions/english-proficiency/>) is required.

When sending TOEFL scores, our institution code is 6877 and a department code is not needed.

- If applicant is not a US citizen and expects an F or J visa: financial information (<https://graduate.unl.edu/prospective/international/financial/>).
- Applicants must also fulfill any additional requirements the department specifies at the time of application.

Additional requirements specific to this program

- Minimum English proficiency: Paper TOEFL (<http://www.toefl.org/>) 600, Internet TOEFL (<http://www.toefl.org/>) 100, IELTS (<https://www.ielts.org/>) 7.0, Duolingo 120.
- GRE is **not** required.
- Resume/CV
- Personal Statement: Your statement should include your research interests, your objectives, and names of potential faculty advisors.
- Three letters of recommendation: Three letters are required; up to 5 may be submitted if identified in the application form prior to submission.

Admission Application Deadlines

For financial consideration: apply by December 1 for Fall or by August 1 for Spring. Otherwise: March 1 for Fall, October 1 for Spring.

Requirements

Hours required: 90