

ABOUT THE DEPARTMENT

Undergraduate Students:	118
Master's Students:	66
Doctoral Students:	31
Faculty Members:	13

GRADUATE DEGREES

Doctor of Philosophy:

Computer Science

Master of Science:

Computer Science Software Engineering

Graduate Certificate:

Software Engineering

CONTACTS

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COMPUTER SCIENCE has changed the way that information is acquired, stored, accessed, and processed. Exciting possibilities exist for students with degrees in computer science and software engineering. Students work with distinguished faculty in applying their math and science skills, gaining valuable hands-on experience, and working on research projects funded by federal, state, and industrial organizations. By learning advanced problem-solving methods, Texas Tech computer science students are prepared to solve the world's challenges in this dynamic and rapidly expanding field.

RESEARCH

The department has an excellent graduate faculty with research specialties in a variety of areas, including artificial intelligence, autonomous robots, bioinformatics, cybersecurity, data compression, information retrieval, networking, parallel and distributed computing, programming languages, and software engineering.

GRADUATE PROGRAMS

Ph.D. in Computer Science

Ph.D. graduates will have the ability to work in multidisciplinary environments with cross-functional teams, perform modeling and experimental analysis on challenging research problems, and investigate current advances in computing research for the purpose of making innovative contributions to society.

Master of Science in Computer Science (M.S.C.S) Master of Science in Software Engineering (M.S.S.E.)

Two general plans are available for the Master of Science degree in the department.

The M.S.C.S. is a multidisciplinary degree program designed to strengthen skills in advanced computing concepts concerning software development, modeling, and experimental techniques.

The M.S.S.E. program is intended to give the graduate a firm foundation in the definition, development and maintenance of complex software systems using traditional engineering process methods.

Certificate of Software Engineering

The certificate in software engineering is intended for those who do not need or wish to have a full graduate degree in software engineering or computer science.

Computer Science Research

Faculty Research Specializations



Dr. Yong Chen Assistant Professor Data-intensive computing, parallel and distributed computing, high-performance computing, cloud computing, computer architectures, systems software.



Dr. Mahshid Rahnamay-Naeini Assistant Professor Computer Networks, Wireless and Sensor Networks, Distributed Computing Systems, Cyber Security, Cyber-Physical Systems, Reliability/Performance Modeling, Applied Probability Theory and Game Theory



Dr. Michael Gelfond<u>Professor</u>

Artificial intelligence, knowledge representation, declarative programming.



Dr. J. Nelson RushtonAssociate Professor
Programming languages, software engineering, computing education.



Dr. Rattikorn HewettProfessor and Department Chair
Intelligent data understanding, network research and security, software quality assurance.



Dr. Michael (Eonsuk) Shin Associate Professor Software engineering, self-managed software systems, secure software engineering, software product lines.



Dr. Sunho Lim Assistant Professor Green networking, mobile software, mobile data management, embedded networked systems.



Dr. Akbar Siami-Namin
Assistant Professor
Software engineering, testing, and program analysis; cyber security and secure programming; energy-aware software engineering; empirical software engineering; and statistical data analysis.



Dr. Noé López-Benitez
Associate Professor
Distributed and parallel computing systems, reliability/ availability/performance modeling.



Dr. Richard Watson
Associate Professor
Director of Undergraduate Studies
Artificial intelligence, knowledge representation,
declarative programming, intelligent agents,
common-sense reasoning, multi-agent systems.



Dr. Susan A. Mengel Associate Professor Information retrieval, security, and assurance; computer science education.



Dr. Yuanlin ZhangAssociate Professor
Artificial intelligence, knowledge representation and reasoning.



Dr. Yu Zhuang
Associate Professor
Director of Graduate Studies
Parallel computing, high performance
memory system, large scale computing,
data intensive computing.