

Department History



Missouri S&T has been offering CS courses since 1957, but an official Master's degree program was established in 1964. A Bachelor's Degree in Computer Science was not added until two years later in 1966. These two degree programs provided a need for a separate Computer Science Department which was established in 1969. Finally, in 1976 the PhD in Computer Science was added to complete the program trifecta.

Advising

As a Freshman or transfer student you will work with a Freshman advisor who will take any transfer credits you may have and create a custom plan of courses for you to start out on the right track. Then the next year, you will be placed with our department advisors who will help you select CS classes in your areas of interest to set you up on the right path for the rest of your time at S&T! They can also help you get involved in research or organizations on campus!

Undergrad Research

- OURE Program
- REU Program

The CS department offers undergraduate students several research opportunities through these programs. Students are able to apply to take part in these and if selected, they are able to work with our faculty on projects of their own individual interest!

S&T CS Alumni WORK HERE!!

- | | | |
|-------------------|--------------|----------------------|
| • 3M | • Google | • Microsoft |
| • Amazon | • Hallmark | • Motorola |
| • Anheuser-Busch | • Honeywell | • Naval Research Lab |
| • AT&T | • HP | • SANDIA |
| • Bank of America | • IBM | • Spectrum |
| • Boeing | • IEEE | • Sprint |
| • Caterpillar | • Intel | • Texaco |
| • ConocoPhillips | • John Deere | • Texas Instruments |
| • Ford | • Los Alamos | • Toshiba |
| • General Motors | • MasterCard | • Verizon |

Research Labs

CPHS Lab

Director: Dr. Sid Nadendla

Our mission is to develop strategic and trustworthy cyber-physical-human systems which improve safety, reliability, trust, and security in human-machine interaction.

CRewMaN Lab

Director: Dr. Sajal Das

Our mission is to conduct innovative research in networking, cyber-physical systems, smart environments, mobile and pervasive computing, parallel/distributed and cloud computing, security and privacy, machine learning, data analytics, biological and social networks, applied graph theory and game theory.

High Performance Computing Lab

Director: Dr. Satish Puri

The focus is on High-Performance Computing, Parallel and Distributed Computing for Spatial Big Data processing. Current research projects are "Analytics on novel cloud computing environments" and "Nearest Neighbor Similarity Search for Shapes". The lab's research will revisit data analytics topics like similarity search and query processing on heterogeneous systems comprised of multi-core CPUs, graphics processing units (GPU), and data processing units (DPU).

SAINT Lab

Director: Dr. Tony Luo

Our mission is to explore the synergy between AI and IoT, design robust machine learning algorithms under non-ideal or even hostile conditions, and safeguard vulnerable IoT systems against security attacks.

SMILE Lab

Director: Dr. Ardhendu Tripathy

Our mission is to obtain methods for autonomous systems that solve novel use-inspired research problems. Our focus is on using statistical techniques to theoretically analyze the performance of proposed methods and to quantify the hardness of the problem.

Theory & Quantum Lab

Director: Dr. Avah Banerjee

Our lab focuses on foundational areas in Computer Science and Quantum Information Science. The main focus areas are Quantum Algorithms for near-term hardware as well as theory of Quantum Computation.

Extreme Scale & AI Computing Lab

Director: CS Department Chair Dr. Seung-Jong Park

The ESAC Lab has developed a cyberinfrastructure for extreme scale applications by building high performance computing & high-speed and developing distributed software frameworks based on AI and big data technologies for compute and data intensive scientific applications.

W2C Lab

Director: Dr. Sanjay Madria

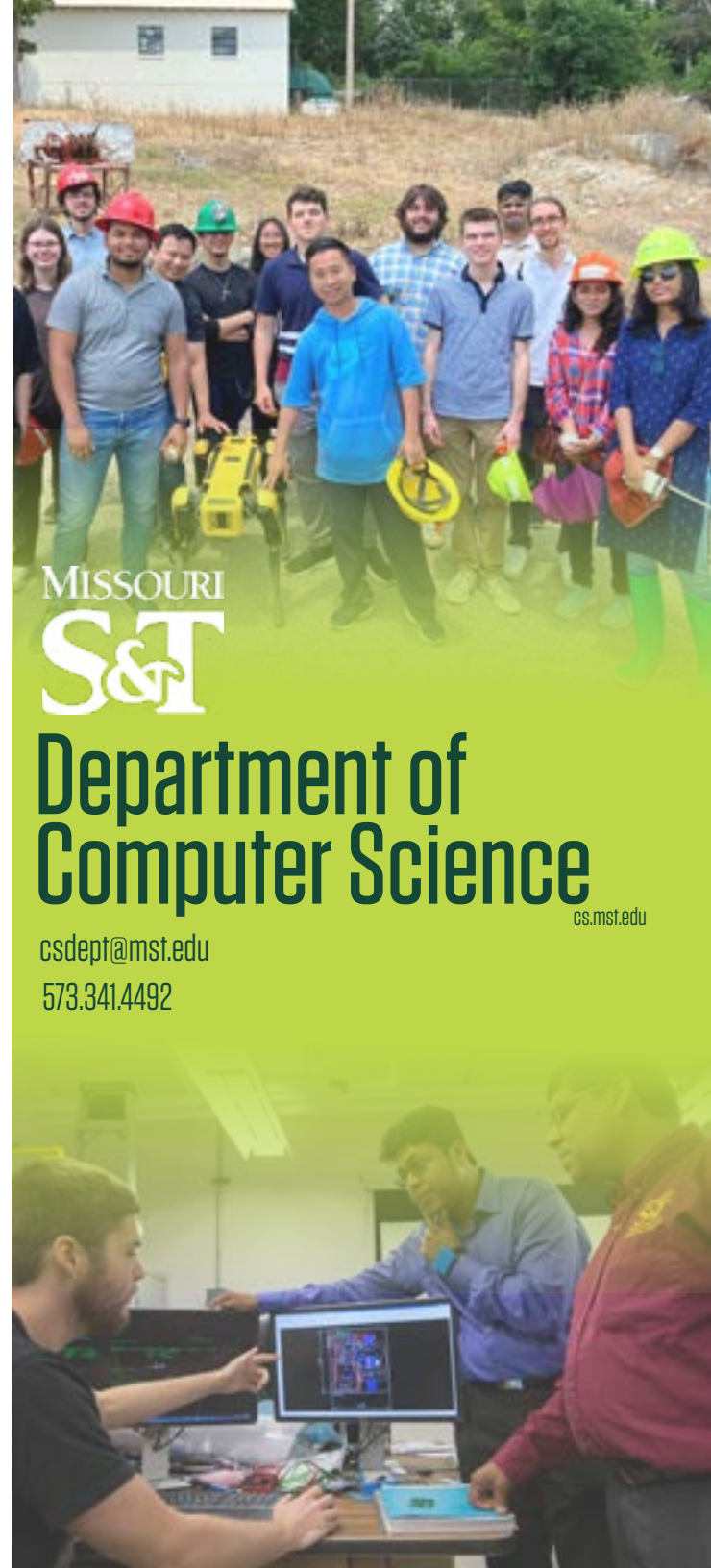
Our mission is to carry out cutting edge research in different aspects of data management (security, compression, replication, caching, query processing, aggregation, fusion) in wireless networks and a cloud computing environment.

And more coming soon...



Computer Science

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Department of Computer Science

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573.341.4492

WHY Comp Sci?

Computers have become a staple of every aspect of the modern world, giving those with degrees in Computer Science virtually unlimited opportunities. While attending S&T, Computer Science majors will take courses that involve Computer Problem Solving (Algorithms), Developing Software, and Implementing Software-Hardware Solutions. The Missouri S&T Computer Science Program is ABET accredited, and has been designated as a hub for learning cyber security by the National Security Agency and the Department of Homeland Security. Missouri S&T offers a unique contribution to the information assurance field with our focus on developing ways to protect the nation's electrical power grid, oil, gas and water distribution systems, and transportations systems from terrorist attacks. Recently, the department has been working on ways to bring these important certifications, like Cyber Security, to the undergraduate level. This will give our students more of a specialized education that can better prepare them for their future in the CS field. We expect to see several Undergraduate Certifications become available for students within the next few semesters (By Fall 2024).

Our department is one of the few on campus that offers a unique way to transition from being an undergraduate student into being a graduate student in just 1 more year of classes! Our 4+1 Grad Track Pathway (GTP) helps students take graduate level courses their last few semester as an undergrad to help them better transition into the Graduate level and allow the student to graduate earlier!

Questions? Contact Us!

573.341.4492

csdept@mst.edu



Student Clubs

Association for Computing Machinery (ACM) has several specialized active student groups that provide additional insight into the science and art of information processing. Utilizing ACM resources can allow you to hone your skills and reach goals in personal development and career-making. ACM groups are also a great way to connect with industry professionals and peers! There is also another club that just started called Google Student Developers Group who will be partnering with ACM to do great things with students!

- ACM Women
- ACM Game
- ACM Competition
- ACM Entrepreneur
- ACM Security
- ACM Web
- ACM Data
- ACM Hack

To learn more about the CS groups above, scan our QR code:



80%

CS students secure a position or enroll in Graduate school 60 days after graduating

\$80,236

Average starting salary for CS Undergraduate Students

\$115,125

Average starting salary for CS Graduate Students

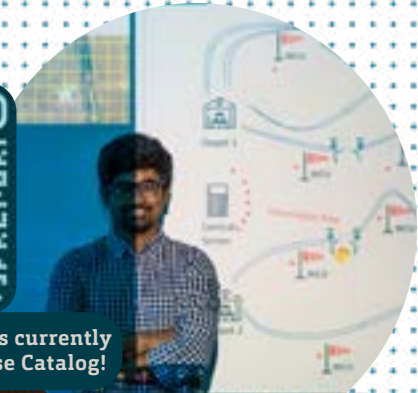


Scholarships

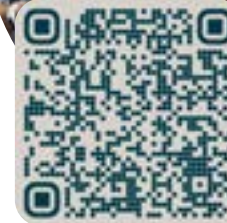
The Computer Science Department has an array of department specific scholarships that are separate from what the University might provide an undergraduate. Scan the QR for more info:



Find all the CS courses currently available in our Course Catalog!



Check out the CS degree flow chart to see where you're at!



Find out your CS Graduation Requirements!



Get a minor in BioInformatics with your CS degree!



Minor in Computer Science with another major!

