FACULTY
Remzi Seker, Ph.D., Chair  •  rxseker@ualr.edu
University of Alabama at Birmingham
Coskun Bayrak, Ph.D.  •  cxbayrak@ualr.edu
Southern Methodist University
Keith Bush, Ph.D.  •  kabush@ualr.edu
Colorado State University
Chia-Chu Chiang, Ph.D.  •  cxchiang@ualr.edu
Arizona State University
Mariofanna Milanova, Ph.D.  •  mgmilanova@ualr.edu
Technical University, Sofia
Steven Minsker, Ph.D.  •  sxminsker@ualr.edu
Massachusetts Institute of Technology
Peiyi Tang, Ph.D.  •  pxtang@ualr.edu
University of Illinois at Urbana-Champaign
Mengjun Xie, Ph.D.  •  mxxie@ualr.edu
College of William and Mary
Kenji Yoshigoe, Ph.D.  •  kxyoshigoe@ualr.edu
University of South Florida, Tampa
Shucheng Yu, Ph.D.  •  sxyu1@ualr.edu
Worcester Polytechnic Institute

UALR  DEPARTMENT OF COMPUTER SCIENCE

(501) 569-8130 ualr.edu/computerscience
Department of Computer Science

The Department of Computer Science prepares students for careers in computer programming, systems analysis, computer software design, and advanced study in computer science. The department cooperates with other computer science and engineering programs in professional activities at the state, national, and international levels. Through its cooperative research grants with local companies, the department is a partner in the economic development of Arkansas.

We offer the following degrees in Computer Science:
- Associate of Science (A.S.)
- Bachelor of Science (B.S.)
- Master of Science (M.S.)
- Doctor of Philosophy (Ph.D.)

High Performance Computing (Supercomputing)

The Department of Computer Science keeps its students on the forefront of high-performance computing (HPC). The photo on the cover is of UALR's HPC located on the sixth floor of the state-of-the-art EIT building. Featuring 512 cores and a theoretical peak performance of 5.5 TFLOPS (or trillion floating point operations per second) this HPC is used by our students to practice large-scale parallel programming and to conduct research in disciplines such as artificial intelligence, simulation, and data mining.

High Performance Computing is the future. Here at UALR we provide our students with the knowledge and skills necessary to stay above the competition long after they have graduated.

Department of Defense/National Security Agency Certification

The Department of Defense and the National Security Agency recognize UALR as a Center of Academic Excellence for Information Assurance Education (CAE-IAE). Employers recognize this certification as an indication of our commitment to information assurance (IA).

UALR’s computer science department offers a minor in IA. Students learn the fundamentals of information assurance and computer forensics. They can further specialize in the field of IA and security by selecting higher-level electives.

Computer forensics is the process of obtaining, analyzing, and presenting digital information for use as evidence. There is a hot job market for this field. As computers have become a larger part of daily life, computers and computer-based commodities have become a part of civil, criminal, and administrative case evidence.

UALR offers courses on high-demand specialty topics and also helps students secure scholarships through the Department of Defense with possible job opportunities for those who study IA.

Gaming and Mobile Applications

A Graphics, Animation, Multimedia, and Entertainment (GAME) option is offered in the Bachelor of Science degree program. The GAME option is designed to complement the core computer science curriculum.

Students participating in the GAME option receive all essential computer science training but also benefit from learning additional skills to begin their career as game programmers, including game design principles, interface development, graphics, and digital art.

Game developers and mobile device programmers (e.g. smart phones) are highly sought after. The Department of Computer Science offers a series of classes and engages in relevant projects to ensure students are proficient in these high-demand areas.

Travel the World

The Department of Computer Science prepares students to be competitive in the global economy. The department cooperates with other computer science and engineering programs in professional activities at the state, national, and international levels. Students have the opportunity to work with foreign students who are visiting UALR or to participate in projects in a foreign country.

Grants have paid for our students to visit countries including France and Germany, where they were exposed to exciting cultures and cutting-edge research.

Jobs

U.S. Bureau of Labor Statistics reports that, "Overall, employment of computer software engineers and computer programmers is projected to increase much faster than the average for all occupations. Job prospects should be best for those with a bachelor’s degree and relevant experience."

“In addition, information security concerns have given rise to new software needs. Concerns over ‘cyber security’ should result in the continued investment in software that protects computer networks and electronic infrastructure. The expansion of this technology over the next 10 years will lead to an increased need for software engineers to design and develop secure applications and systems, and to integrate them into older systems.”

Source: bls.gov

The top jobs in America in 2010 were Software Engineer and Computer Systems Analyst.

Source: careercast.com

Computer science was the second highest-paid occupation after chemical engineering. The average annual salary for a 2011 computer science graduate was $63,017.

Source: msn.careerbuilder.com