

Department of Computer Science
Tenure Track Faculty
Teaching Interests and Areas of Scholarship

Faculty	Teaching Interests	Areas of Scholarship
Arad, Behnam	Hardware Design and Validation using EDA tools; Computer architecture; Parallel computing.	Design of Power-efficient Hardware; Validation of Complex Embedded Systems; Hardware Security.
Chang, Weide	Operating Systems; Compiler Construction; Computer Architecture.	Hidden Markov Modeling; Social Network Analysis.
Dai, Jun	Network Security; Computer Networking; Computer Forensics.	Network and Distributed System Security; Big Data in Enterprise Cyber Security Space; Cloud Security; Mobile Security.
Faroughi, Nikrouz	Digital Logic; Computer Architecture.	Single and Multiprocessor Systems Architecture; Computer Security through Hardware.
Ghansah, Isaac	Computer Security and Privacy; Computer Networks; Computer Architecture.	Security Issues in Critical Infrastructures such as Smart Grid; Computer Forensic Investigation.
Gordon, V. Scott	Artificial Intelligence; Graphics; Video Game Architecture.	Artificial Intelligence; Neural and Evolutionary Computation; Computer Science K12 Education.
Jin, Ying	Database Design, Database System Implementation, Data structures; Algorithm Analysis.	Database Systems and Applications; Event and Rule Processing in Centralized and Distributed Environments; Data Security and Privacy.
Krovetz, Ted	Computer programming; Discrete mathematics; Design and Analysis of Algorithms; Compilers; Cryptography.	High-speed Provable Symmetric Cryptography; Authenticated Encryption; Universal Hashing; Specification and Implementation of Cryptographic Algorithms.
Lan, Kwai-Ting	Operating systems; Computer Architecture; Web Technology.	Operating systems; Computer Architecture; 3D Graphics Technology; Web Technology.
Lu, Meiliu	Data Warehousing and Data Mining; Machine Learning; Algorithms; Computing Theory.	Knowledge Discovery in Databases; Big-data Applications; Machine Learning Algorithms Design and Applications; Education Capacity Building through User-paced Learning Tools.

Muyan-Ozcelik, Pinar	Computer Games and Graphics; Mobile Computing; GPU Computing.	Running Real-time Tasks on Embedded Systems using GPU Computing; Multitasking among such tasks.
Ouyang, Jinsong	Distributed Systems; Data Structures and Algorithm Analysis; Operating Systems.	Distributed Systems Including Cloud Computing, Mobile and Ubiquitous Computing, and Computer Networks.
Salem, Ahmed	Software Engineering; Software Testing and Quality Assurance; System Requirements Engineering.	Requirements Specification and Design Modeling; Verification and Validation Methodology and Techniques; Information Assurance.
Ghassan Shobaki	Compilers; Algorithms and Theory of Computation; Operating Systems.	Compiler Optimizations; Combinatorial Optimization Algorithms; Computer Architecture and System Performance.
Wang, Chung-E	Design and Analysis of Algorithms; Systems Programming; Computer Networking; Introductory Programming.	Algorithms; Parallel Computation; Computer Networking; Compression; Encryption; Computational Biology.
Zhang, Cui	Programming Language Theories and Paradigms; Formal Methods for Secure Software Engineering; Software Architecture.	Formal Methods for Secure Software Engineering; Secure Coding for Software Security; Software Architecture; Programming Language Theories and Paradigms.