FACULTY

Jim Anderson, Instructor I, electrical and healthcare networks, cybersecurity.
Marvin Andujar, Assistant Professor, brain-computer interfaces, drones.
Zachariah Beasley, Instructor I, sentiment analysis and data mining.
Shaun Canavan, Assistant Professor, computer vision, effective computing.
Sriram Chellappan, Professor, socio-technical systems.
Ken Christensen, Professor, energy efficient networks.
Giovanni Luca Ciampaglia, Assistant Professor, network science and computational social science.
Suzie-Chun (Roger) Fang, Instructor II, data modeling and information systems.
Alessio Gaspar, Associate Professor, evolutionary algorithms and computing education research.
Dmitry Golgof, Distinguished University Professor, medical image analysis, computer vision, AI.
Lawrence Hall, Distinguished University Professor, intelligent systems, data mining, AI.
William Hendrix III, Instructor I, graph algorithms and parallel computing.
Isabelo Hidalgo, Instructor I, human-computer interaction.
Adriana Iamnitchi, Professor, distributed systems, computational sociology, AI.
Heinrich Jeanty, Instructor I, technical analysis algorithms.
Robert Karam, Instructor II, hardware security, reconfigurable computing, bioimplantable devices.
Srinivas Katkoori, Associate Professor, low power VLSI synthesis.
Valentina Kozhova, Instructor I, computer vision.
Miguel Labrador, Professor, computer networks and autonomous sensing.
John Licato, Associate Professor, MIP, cognitive modeling, formal/informal reasoning, AI.
Jay Ligatti, Professor, software security and programming languages.
Yao Liu, Associate Professor, network security and wireless technologies.
Mehran Mozaffari Kermani, Associate Professor, cryptographic engineering.
John Murray-Bruce, Assistant Professor, computational imaging and sensing, sampling theory.
Tempestt Neal, Assistant Professor, mobile biometrics, ubiquitous sensing, language processing.
Xeming (Simon) Ou, Professor, cybersecurity and cyber physical systems.
Marbin Pazos-Revilla, Instructor I, cyber-physical systems and IoT.
Rafael Perez, Professor, artificial intelligence and neural networks.
Les Plagl, Professor, geometric modeling and computer graphics.
Paul Rosen, Assistant Professor, data visualization and computer graphics.
Sudeep Sarkar, Professor, computer vision, biometrics, and AI.
Schimmel Small, Instructor I, programming languages and visual analytics.
Yu Sun, Professor, intelligent systems, robotics, deep learning.
Yicheng Tu, Professor, database systems and multimedia systems.
Phil Ventura, Instructor II, pedagogy of object orientation.
Jing Wang, Instructor II, computer animation and K-12 software.
Alfredo Weitzenfeld, Professor, biologically-inspired robotics and intelligent systems.
Attila A. Yavuz, Assistant Professor, applied cryptology and privacy enhancing technologies.
Yan Zhang, Instructor I, congestion control and energy optimization.
Hao Zheng, Associate Professor, system verification and validation.

LEADERSHIP

Sudeep Sarkar, Chair
Dmitry Golgof, Vice-Chair
Ken Christensen, Associate Chair of Undergraduate Affairs
Yu Sun, Associate Chair of Graduate Affairs
Marbin Pazos-Revilla, CSE Tech Administrator
Jing Wang, Director of Broadening Participation in Computing
William Hendrix III, Program Director for CS/CSE
Schimmel Small, Program Director for IT
Sriram Chellappan, Program Director for CySE

ADVISORY BOARD

John Morgan, Undergraduate Advisor
Marjorie Fontalvo, Undergraduate Advisor
Laura Oczarek, Academic Services Administrator
Ashlee John, Academic Program Specialist
Mayra Marlin, Undergraduate Program Specialist
Brad Lawrence, Microsoft
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Asha Calderon, Johnson & Johnson
Sidney Fernandes, USF IT
Mike Forest, J.P. Morgan Chase

UNIVERSITY of SOUTH FLORIDA

COMPUTER SCIENCE
AND ENGINEERING

FACTS 2019 - 2020

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www.usf.edu/engineering/cse
**KEY FACTS AND RANKINGS**

- The 2021 US News & World Report ranked our Computer Engineering program in the 52nd place among public universities.
- The 2021 US News & World Report ranked the graduate Masters of Science in Information Technology program #14 for online IT programs.
- USF Institute for Artificial Intelligence (I4AI) was approved by the Florida Board of Governors in 2019.
- Faculty members are currently receiving $3.3 million in active external research grants from NSF, DoD, NIH, NIST, industry, and state sources. Twelve Department faculty members are NSF CAREER awardees.
- USF CSE is in the top 20% (rank 34) of Computer Science departments at U.S. public universities, according to Academic Analytics (2018) data based on Scholarly Research Index. *This dataset includes weights for grants, articles, conferences, awards, and citations.*
- USF CSE has a major initiative to broaden participation in computing through a three-year grant from NIH, NIST, industry, and state sources. Twelve Department faculty members are NSF CAREER awardees.
- USF Institute for Artificial Intelligence (I4AI) was approved by the Florida Board of Governors in 2019.
- The 2021 US News & World Report ranked our Computer Engineering program in the 52nd place among public universities.

**FACULTY RESEARCH AREAS**

**A.I. and Cognitive Computing**
- Computer Vision and Pattern Recognition, Artificial Intelligence and Machine Learning, Robotics, Brain-Computer Interfaces, Computational Neuroscience, Affective Computing

**Cybersecurity**

**Efficient Computing Platforms**
- Computer Architecture, VLSI, Ubiquitous Sensing Networks, Distributed Computing, Parallel Processing, and Biomedical Devices

**Big-Data Algorithms**
- Biomedical Imaging, Machine Learning, Databases, Visualization, Social Networks, and Efficient Computing Platforms

**FACULTY HONORS AND AWARDS**

- **Academic Honors and Fellowships:** 7 IEEE, 4 AAAAS, 1 NAI, 3 AIMBE, 4 IAPR
- **IEEE Norbert Weiner Award**
- **2 ACM CCS Test of Time Awards**
- **1 IEEE DSN Test of Time Award**
- **12 NSF CAREER Awards**

**INNOVATION, PATENTS, AND LICENSES FY 2016-2020**

- 38 patents issued to faculty
- 120 US and foreign patent applications
- 6 copyrights
- 13 license/option agreements
- 4 NSF I-Corps Teams

**CSE STUDENT ORGANIZATIONS**

- Women in Computer Science and Engineering (WCSE)
- Whistlers Computer Security Club
- Society of Competitive Programmers (SCP)
- RoboBulls
- GameDev Club (GDC)
- Developer Student Club (DSC)
- IEEE Computer Society (IEEE-CS)
- Brain-Computer Interface (BCI) Club
- Association for Computing Machinery (ACM)

**SELECTED EXTERNAL RESEARCH GRANTS 2019-2020**

- Christensen, Ken (PI), Rafael Perez, Collaborative Research: Florida IT Pathways to Success (FlitPath), NSF, $1,557,307, 10/1/2016-5/30/2021
- Gaspar, Alejandro (USF), Rudolf Wiegand (UCF), Using Coevolutionary Algorithms to Identify DistractorAnswers for Multiple Choice Questions Used for Peer Instruction, NSF, $599,890, 04/01/2020-04/30/2023
- Moston, Peter (SRC PI), Golgol, Dmitry (USF PI), Hall, Lawrence STTR Phase II Microscale-based Technology for Automatic Brain Cell Counts Using Unbiased Methods, NSF + FHTC Matching Program, $449,272, 11/1/2019 – 09/30/2021
- Iamnitchi, Adriana (PI), Hall, Lawrence, Skwark Jr. John, Modeling Information Diffusion Processes with Deep Learning Algorithms, DARPA, $1,704,461, 10/12/2017-10/11/2021
- Karam, Robert (PI), Kekoni, Sinivas, Mozaffari-Kermani, Mehran, SaTC: EDU: Improving Student Learning through Competitive Embedded System Security Challenges, NSF, $491,145, 05/01/2020 – 04/30/2023
- Mozaffari Kermani, Mehran (PI), Investigating Active Side-Channel Attacks and Developing Countermeasures for Standardization of Lightweight Cryptography, NSF, $500,000, 04/01/2020-04/01/2024
- Thomas, Sylvia (PI), Neal, Tempestt, Nego, Alessandro, RAPID: Early Detection of Disease Outbreaks using Self-Organizing Patterns – COVID-19, NSF, $200,000, 05/07/2020-04/06/2023
- Rosen, Paul, CAREER: Discovering Structure in Uncertainty Using Topology for Interactive Visualization of Uncertainty, NSF, $526,784, 09/01/2019-08/31/2021
- Sarkar, Sudip (PI), Wang, Jing, Christensen, Ken, Broadening Participation in Computer Science and Engineering at University of South Florida, NU Center for Inclusive Computing, $579,737, 2020-2023
- Sarkar, Sudip (USF); Srinivasu, Anu (FSU); Askar, Sathyaarpanan (OSU); Ri: Medium: Collaborative Research: Understanding Events from Streaming Video – Joint Deep and Graph Representations, Commmomness Priorcs, and Predictive Learning, NSF, $1,005,543, 10/1/2020-09/30/2024
- Sun, Yu (PI), Dmitry Golgol, Thao Ho, Denise Maguire, Y angmin Huang, A Multimodal Approach for Monitoring Prolonged Acute Pain in Neonates, NIH RR1, $400,567, 7/16/2020-6/30/2022
- Sun, Yu, Ri: Small: Generalizing Learned Manipulation Skills to Unseen Situations by Balancing Uncertainties, NSF, $334,823, 9/1/2018-8/31/2022
- Jean-Marie Fellous (U Arizona), Zelwentzen, Alfredo (USF), Ri: Medium: Collaborative Research: Experimental and Robotics Investigations of Multi-Scale Spatial Memory consolidation of Complex Environments, NSF, $1,026,376, 9/1/2017-8/31/2021
- Yavuz, Attila A., CAREER: Lightweight and Fast Authentication for Internet of Things, NSF, $500,000, 03/01/2017 - 02/28/2022