

FACULTY

Jim Anderson, Assistant Professor of Instruction, electrical and healthcare networks, cybersecurity.

Marvin Andujar, Assistant Professor, brain-computer interfaces, drones.

Zachariah Beasley, Assistant Professor of Instruction, sentiment analysis and data mining.

Shaun Canavan, Assistant Professor, computer vision, affective computing.

Sriram Chellappan, Professor, socio-technical systems.

Ken Christensen, Professor, energy efficient networks.

Giovanni Luca Ciampaglia, Assistant Professor, network science and computational social science.

Suey-Chun (Roger) Fang, Associate Professor of Instruction, data modeling and information systems.

Alessio Gaspar, Associate Professor, evolutionary algorithms and computing education research.

William Gauvin, Adjunct Instructor, cybersecurity.

Dmitry Goldgof, Distinguished University Professor, medical image analysis, computer vision, AI.

Lawrence Hall, Distinguished University Professor, intelligent systems, data mining, AI.

William Hendrix III, Assistant Professor of Instruction, graph algorithms and parallel computing.

Isabela Hidalgo, Assistant Professor of Instruction, human-computer interaction.

Marilynn Carol Hoeke, Adjunct Instructor, information technology.

Scot Hollingsworth, Adjunct Instructor, information technology.

Adriana Iamnitchi, Professor, distributed systems, computational sociology, AI.

Henrick Jeanty, Assistant Professor of Instruction, technical analysis algorithms.

Robert Karam, Assistant Professor, hardware security, reconfigurable computing, bioimplantable devices.

Srinivas Katkooi, Associate Professor, low power VLSI synthesis.

Valentina Korzhova, Assistant Professor of Instruction, computer vision.

John Licato, Assistant Professor, NLP, 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.

Xinming (Simon) Ou, Professor, cybersecurity and human aspects of computing.

Marbin Pazos-Revilla, Assistant Professor of Instruction, cyber-physical systems and IoT.

Les Piegl, Professor, geometric modeling and computer graphics.

Richard Rauscher, Adjunct Instructor, quantum computing.

Paul Rosen, Associate Professor, data visualization and computer graphics.

Sudeep Sarkar, Distinguished University Professor, computer vision, biometrics, and AI.

Schinnel Small, Assistant Professor of Instruction, programming languages and visual analytics.

Yu Sun, Professor, intelligent systems, robotics, deep learning.

Yicheng Tu, Professor, database systems and multimedia systems.

Phil Ventura, Associate Professor of Instruction, pedagogy of object orientation.

Jing Wang, Professor of Instruction, computer animation and K-12 outreach.

Alfredo Weitzenfeld, Professor, biologically inspired robotics and intelligent systems.

Attila A. Yavuz, Associate Professor, applied cryptography and privacy enhancing technologies.

Yan Zhang, Assistant Professor of Instruction, congestion control and energy optimization.

Hao Zheng, Associate Professor, system verification and validation.

LEADERSHIP

Sudeep Sarkar, Chair

Dmitry Goldgof, Vice-Chair

Ken Christensen, Associate Chair of Undergraduate Affairs

Xinming Ou, Associate Chair of Graduate Affairs

Jay Ligatti, Director of Graduate Admissions

Paul Rosen, Director of REU

Marbin Pazos-Revilla, CSE Tech Administrator

Jing Wang, Director of Broadening Participation in Computing

William Hendrix III, Program Director for CS/CpE

Schinnel Small, Program Director for IT

Sriram Chellappan, Program Director for Cys

ADVISING

John Morgan, Undergraduate Advisor

Marjorie Fontalvo, Undergraduate Advisor

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Laura Owczarek, Academic Services Administrator

Jessica Pruitt, Graduate Program Specialist

Mayra Morfin, Undergraduate Program Specialist

Ashlee John, Academic Program Specialist

Elijah Malaby, Systems Administrator

Jerry Theronier, Webmaster

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UNIVERSITY of
SOUTH FLORIDA



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COMPUTER SCIENCE AND ENGINEERING

FACTS
2020 - 2021



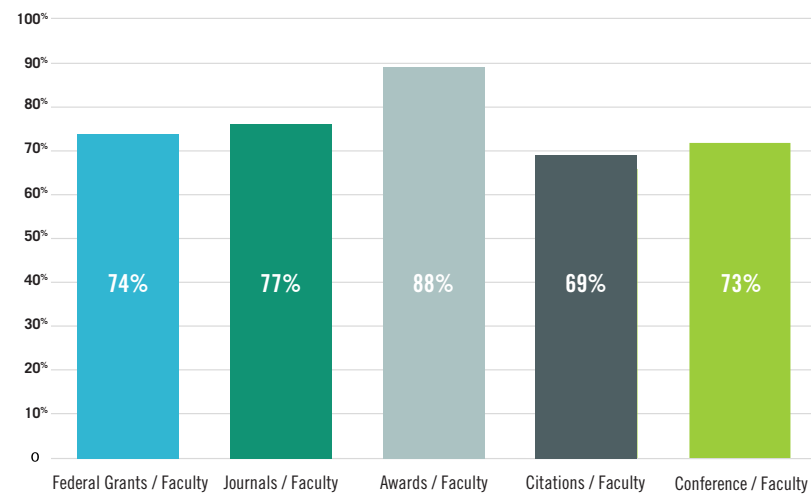
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KEY FACTS AND RANKINGS

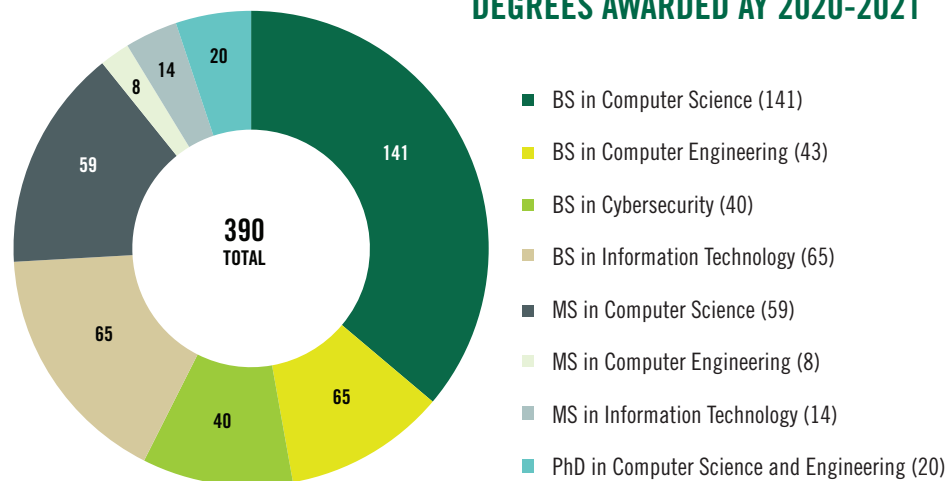
- USF CSE is in the top 10% (rank 21) of Computer Science departments at U.S. public universities, according to Academic Analytics (2019) data based on Scholarly Research Index of default weights for grants, articles, conferences, awards, and citations.
- The 2022 US News & World Report ranked our graduate Computer Engineering program 57th place among public universities and 92 out of 154 among all universities, public and private.
- The 2022 US News & World Report ranked the graduate Masters of Science in Information Technology program #14 for online IT programs.
- CSE faculty members lead USF Institute for Artificial Intelligence (AI+X), USF Center for Cryptographic Research, and USF Quantum Initiative.
- Faculty members are currently executing \$12 million in active external research grants from NSF, DoD, NIH, NIST, industry, and state sources. Twelve CSE faculty members are NSF CAREER awardees.
- USF CSE has a major initiative to broaden participation in computing through a three-year grant from NU Center for Inclusive Computing.
- CSE has an active Computing Partners Program with many companies.

RESEARCH BENCHMARKS

Academic Analytics 2019
Comparison Group: US Public Institutions
Overall Rank: 21

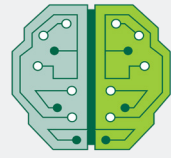


DEGREES AWARDED AY 2020-2021



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



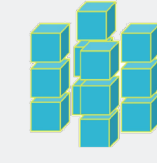
Cryptography, Trustworthy Computing, Network Security, Smart Bio-Devices, Hardware Security, Biometrics

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

FACULTY HONORS AND AWARDS

- Fellows: 3 IEEE, 3 AAAS, 1 NAI, 3 AIMBE, 3 IAPR, 1 ASEMFL
- 2 ACM CCS Test of Time Awards
- 1 IEEE Norbert Wiener Award
- 1 IEEE CIS Fuzzy Systems Pioneer Award
- 1 IEEE DSN Test of Time Award
- 12 NSF CAREER Awards
- 3 Distinguished University Professors

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 Cybersecurity (WICYS)
- Women in Computer Science and Engineering (WiCSE)
- Whitehatters Computer Security Club
- Society of Competitive Programmers (SCP)
- RoboBulls
- IEEE Computer Society (IEEE - CS)
- Google Developer Student Club (DSC)
- Girls Who Code College Loop
- GameDev Club (GDC)
- Brain-Computer Interface (BCI) Club
- Association for Computing Machinery (ACM)

SELECTED EXTERNAL RESEARCH GRANTS 2020-2021

- Canavan, Shaun (PI); Sarkar, Sudeep; Hall, Lawrence; Goldgof, Dmitry; Rosen, Paul**, A Novel, Robust Fake Video Detection System, Defense Intelligence Agency, \$904,980, 5/28/2020 - 5/27/2021.
- Carney, R. (PI); **Chellappan, Sriram**; Bowser, A; Low, R., Surveillance and Control of Mosquito-Borne Diseases through Automated Species Identification and Spatiotemporal Modeling, NSF, \$916,000, 10/01/2020 - 9/30/2024.
- Christensen, Ken (PI); Paul Rosen; Rafael Perez**, Florida Information Technology Graduation Attainment Pathways, NSF, \$1,421,774, 07/01/2021-06/30/2026.
- Gaspar, Alessio**, Coevolutionary Peer Instruction, NSF, \$377,012, 07/01/2020 - 07/01/2023.
- Mouton, P. (SRC PI); **Goldgof, Dmitry (PI); Hall, Lawrence**, STTR Phase II: Microscope-based Technology for Automatic Brain Cell Counts Using Unbiased Methods, NSF+ Florida High Tech Corridor, \$899,292, 11/1/2019 - 9/31/2021.
- Iamnitich, Adriana (PI); Hall, Lawrence**; Skvoretz Jr., John, Modeling Information Diffusion Processes with Deep Learning Algorithms, DARPA, \$1,704,461, 10/12/2017-10/11/2021.
- Karam, Robert (PI), Katkooi, Srinivas, Mozaffari-Kermani, Mehran**, Improving Student Learning through Competitive Embedded System Security Challenges, NSF, \$499,145, 05/01/2020 - 04/30/2023.
- Liu, Yao (PI)**, Zhuo L., Creating Content Verification Tools to Protect Document Integrity, NSF, \$500,000, 10/1/2020-9/30/2023.
- Mozaffari Kermani, Mehran (PI)**, Investigating Active Side-Channel Attacks and Developing Countermeasures for Standardization of Lightweight Cryptography, NIST, \$500,000, 04/01/2020-04/01/2024.
- Neal, Tempestt (PI); Canavan, Shaun**; Anthony, L.; Ruiz, J., Toward Age-Aware Continuous Authentication on Personal Computing Devices, NSF, \$533,292, 04/01/2021-03/31/2023.
- Kosyluk, K. (PI); **Neal, Tempestt**; Salzer, M.; Corrigan, P., Up To Me: Erasing the Stigma of Mental Illness on College Campuses, NIH/NIDILRR, \$600,000, 09/01/2021-08/31/2024.
- Ou, Xinming (PI)**; Lende, D.; **Ligatti, Jay**, Understanding Security in the Software Development Lifecycle: A Holistic, Mixed-Methods Approach, NSF, \$500,000, 09/01/2018-08/31/2022.
- Rosen, Paul**, "CAREER: Discovering Structure in Uncertainty: Using Topology for Interactive Visualization of Uncertainty," NSF, \$ 526,784; 08/15/2019-08/14/2024.
- Alman, A.; Couluris, M.; **Rosen, Paul**, Feasibility of mHealth Technology for Improving Self-Management and Adherence Among Asthmatic Adolescents, NIH, \$655,737, 8/1/2020 - 5/31/2023.
- Sarkar, Sudeep; Christensen, Ken; Wang, Jing**, Broadening Participation in Computing, NU Center for Inclusive Computing, Pivotal Ventures, \$579,737, 11/1/2020-10/31/2023.
- Sarkar, Sudeep**; Srivastava, A. (FSU); Aakur, S. (OSU), Understanding Events from Streaming Video - Joint Deep and Graph Representations, Commonsense Priors, and Predictive Learning. NSF, \$1,005,543, 10/1/2020-9/30/2024.
- Sun, Yu (PI)**, Dmitry Goldgof, Thao H., Denise M., Yangxin H., A Multimodal Approach for Monitoring Prolonged Acute Pain in Neonates, NIH R21, \$400,567, 7/16/2020-6/30/2022.
- Tu, Yicheng**, Data Management Molecular Simulations - A Throughput-Oriented Approach, NIH-R01 (NIGMS), \$1,149,236, 9/22/2021-9/21/2025.
- Weitzenfeld, Alfredo**, Experimental and Robotics Investigations of Multi-Scale Spatial Memory consolidation of Complex Environments, NSF \$494,420, 9/1/2017-8/31/2022.