

## Department Faculty

**Fathi Amsaad**, Visiting Instructor (MS, University of Toledo), cyber-physical systems.

**Dave Armitage**, Associate Professor (PhD, University of Rhode Island), asynchronous logics and systems.

**Sriram Chellapan**, Associate Professor (PhD, Ohio State University), socio-technical systems.

**Ken Christensen**, Professor and Interim Chair (PhD, North Carolina State University), energy efficient networks.

**Alessio Gaspar**, Associate Professor (PhD, Université de Nice-Sophia Antipolis), evolutionary algorithms and computing education research.

**Dmitry Goldgof**, Professor and Interim Associate Chair (PhD, University of Illinois at Urbana-Champaign), medical image analysis and computer vision.

**Lawrence Hall**, Distinguished University Professor (PhD, Florida State University), intelligent systems and data mining.

**William Hendrix III**, Instructor I (PhD, North Carolina State University), graph algorithms and parallel computing.

**Isabela Hidalgo**, Instructor I (PhD, University of South Florida), human-computer interaction.

**Adriana Iamnitchi**, Associate Professor (PhD, University of Chicago), distributed systems and computational sociology.

**Henrick Jeanty**, Instructor I (PhD, The City College of New York), technical analysis algorithms.

**Rangachar Kasturi**, Douglas W. Hood Professor (PhD, Texas Tech University), computer vision and pattern recognition.

**Srinivas Katkoori**, Associate Professor (PhD, University of Cincinnati), low power VLSI synthesis.

**Valentina Korzhova**, Instructor I (PhD, University of South Florida), computer vision.

**Miguel Labrador**, Professor and Graduate Program Director (PhD, University of Pittsburgh), computer networks and ubiquitous sensing.

**Jay Ligatti**, Associate Professor (PhD, Princeton University), software security and programming languages.

**Yao Liu**, Assistant Professor (PhD, North Carolina State University), network security.

**Xinming Ou**, Associate Professor (PhD, Princeton University), cyber security and cyber physical systems.

**Rafael Perez**, Professor (PhD, University of Pittsburgh), artificial intelligence and neural networks.

**Les Piegl**, Professor (PhD, Eotvos University), geometric modeling and computer graphics.

**Paul Rosen**, Assistant Professor (PhD, Purdue University), data visualization and computer graphics.

**Sudeep Sarkar**, Professor and Associate Vice President for Research (PhD, Ohio State University), computer vision and image analysis.

**Schinnel Small**, Instructor I (DEng, Morgan State University), programming languages and visual analytics.

**Yu Sun**, Associate Professor (PhD, University of Utah), intelligent systems, robotics, and cyber physical systems.

**Ralph Tindell**, Instructor I (PhD, Florida State University), mathematics and computer science.

**Yicheng Tu**, Associate Professor (PhD, Purdue University), database systems and multimedia systems.

**Phil Ventura**, Instructor II (PhD, SUNY Buffalo), pedagogy of object orientation.

**Jing Wang**, Instructor II (PhD, Vanderbilt University), computer animation and K-12 outreach.

**Alfredo Weitzenfeld**, Professor (PhD, University of Southern California), cognitive robotics and humanoid robots.

**Yan Zhang**, Instructor I (PhD, New Jersey Institute of Technology), congestion control and energy optimization.

**Zhen Zhang**, Visiting Assistant Professor (PhD, University of Utah), modeling and verification of concurrent systems.

**Hao Zheng**, Associate Professor (PhD, University of Utah), system verification and validation.

## Department Advisory Board

**David Allen**, Senior Vice President and Chief Technical Officer, Raymond James Financial.

**Kevin Bowyer**, Professor and Chair, Notre Dame University.

**Alan Brannan**, Director of Engineering, CAE.

**Nancy Crews**, Owner, Custom Manufacturing and Engineering.

**Chad Hage**, Director of Global Engineering, Nielsen.

**Jeremy L. Rasmussen**, Cybersecurity Director, Abacode.

**Maha Sallam**, President, VuEssence.

**John R. Samson**, Principal Engineering Fellow, Honeywell.

**Mark Volpe**, Engineering Manager, Raytheon.

# Department of Computer Science and Engineering

## FACTS

2015 - 2016



The Department of Computer Science and Engineering in the College of Engineering at USF is a nationally top-ranked department with outstanding faculty, student success, high demand, critical importance to the state, and a strong focus on research and recruitment of students from underrepresented populations. The Department is the smallest Computer Science department in the five largest Florida universities in number of faculty, but is the highest ranked department in the state by NRC Research Quality ranking.

## Faculty Profile

- Distinguished University Professor – 1
- Professor – 8
- Associate Professor – 10
- Assistant Professor – 2
- Instructor II – 2
- Instructor I – 7
- Visiting Faculty – 2
- Courtesy Faculty – 4
- Emeritus Faculty – 5

## Faculty Honors and Awards

- 4 IEEE, 4 IAPR, 2 AAAS, and 1 AIMBE Fellows
- 1 IEEE Norbert Weiner Award
- 1 IEEE Richard E. Merwin Award for Distinguished Service
- 1 ACM CCS Test of Time Award
- 10 NSF CAREER awardees
- 2 USF Outstanding Faculty awardees
- 6 USF Outstanding Research Achievement awardees
- 6 USF Outstanding Teaching awardees
- 3 USF Excellence in Innovation awardees
- 1 USF Jerome Krivanek Distinguished Teacher Award
- 1 USF Askounes-Ashford Distinguished Scholar Award
- 31 patents issued to faculty in last 10 years

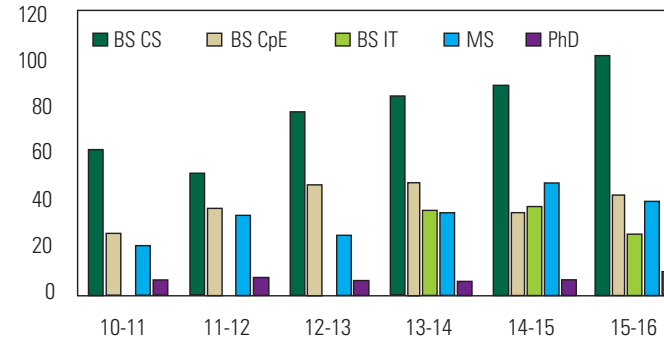
## Faculty Research Areas

Research areas include artificial intelligence and intelligent systems, computer and network security, computer vision and pattern recognition, computing education research, databases, distributed systems, graphics and visualization, location-aware information systems, networks, programming languages, robotics, VLSI, computer architecture, and parallel processing.

## Degree Programs

- BS in Computer Science
- BS in Computer Engineering
- BS in Information Technology (online only)
- MS in Computer Science
- MS in Computer Engineering
- MS in Information Technology (online and face-to-face)
- PhD in Computer Science and Engineering

## Degrees Awarded



In AY 2015-2016 the Department awarded 104 BSCS, 44 BSCpE, 27 BSIT, 30 MSCS, 8 MSCpE, 3 MSIT, and 10 PhD.

## Enrollment

In Fall 2015 enrollment was 331 BSCS, 150 BSCpE, 195 BSIT, 78 MSCS, 14 MSCpE, 22 MSIT, and 77 PhD. In addition there were 827 pre BS CS, CpE, and IT students in the College. These are undergraduate students not yet admitted to the Department. In total, the Department has about 33% of all undergraduate students in the College when including “pre” students.

The percentage of women in the three BS programs is 14.2%, in the three MS programs it is 27.2%, and in the PhD program it is 14.3%. For the BS and MS programs this is an increase from 5 years ago.



The Bachelor of Science degree program in Computer Engineering is accredited by the Engineering Accreditation Commission of ABET



The Bachelor of Science degree program in Computer Science is accredited by the Computing Accreditation Commission of ABET

[www.abet.org](http://www.abet.org)

## Key Rankings

The Department is ranked in the top one-third of all Computer Science programs by Research Quality in the 2010 National Research Council data-based assessment of research-doctorate programs.

Rankings from ASEE include:

- Top 40 for awarding bachelor degrees for computer science and top 50 for awarding bachelor degrees for computer engineering
- Top 40 for undergraduate enrollment
- Top 10 for percentage of doctoral degrees awarded to women

## Research Grants (for AY1516)

Research grants awarded to Department faculty totaled \$3,080,061. Research expenditures by Department faculty totaled \$1,523,627.

## Selected Recent Grants (for AY1516)

**Jay Ligatti, Yao Liu, and Dmitry Goldgof**, “Analysis of Cryptographic Primitives and Protocols,” CBT Holding, \$56,649, and Florida High Tech Corridor, \$56,649.

**Yu Sun**, “EAGER: Characterizing Physical Interaction in Instrument Manipulations,” NSF, \$299,887.

**Yao Liu**, “CAREER: A Pathway towards Channel Camouflage and Manipulation Techniques for Wireless Security,” NSF, \$499,950.

Tim Fawcett, **Ken Christensen**, Ann Eddins, Jeffrey Krischer, and Joseph Walton, “CC\*DNI Networking Infrastructure: Campus Research Network - High Bandwidth Private Network Path for Research Data from Experiment to Analysis and Back Again at USF,” NSF, \$495,645.

**Yao Liu and Jay Ligatti**, “TWC: Small: Techniques and Tools for Enforcing Proximity-based Policies in Wireless Systems,” NSF, \$300,000.

**Adriana Iamnitchi** and John Skvoretz, “BIGDATA: IA: F: Structural Anonymization Techniques for Large, Labeled, and Dynamic Social Graphs,” NSF, \$661,289.

Bei Phillips and **Paul Rosen**, “III: Medium: Collaborative Research: Topological Data Analysis for Large Network Visualization,” NSF, \$777,369.

**Yicheng Tu, Sagar Pandit, Jay Ligatti, Sudeep Sarkar, and Swaroop Ghosh**, “II-New: A Research Platform for Heterogeneous, Massively Parallel Computing,” NSF, \$679,798.