# **ISC**Viterbi

School of Engineering Department of Computer Science

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#### **BY THE NUMBERS**

#### FACULTY

85	Faculty Members
41	Tenure-Track
29	Dessereb Facul

**Research Faculty** 15 **Teaching Faculty** 

# **STUDENTS**

4845	Students
142	9 Undergraduate
310	2 Master's

314 Ph.D.

#### CADEMY MEMBERS **& SOCIETY FELLOWS**

1	ACM Turing Award Winner
5	NAE
2	NAS
11	ACM
17	IEEE
15	AAAI
11	AAAS

# **MAKING AN IMPACT - INNOVATION FOR HUMANITY**

### **NEWS HIGHLIGHTS**

USC Games established the Gerald A. Lawson Endowment Fund, supporting Black and Indigenous students

Trojans celebrated the groundbreaking of a new building for computer science at USC, a 116,000-square-foot facility focused on improving and benefiting society

USC computer science researchers are collaborating in new \$20M NSF Institute to tackle tough challenges, such as food security, using AI and mathematics

The newly launched USC Center for Autonomy and AI will bring together researchers across USC Viterbi to work on projects including autonomous robotic systems and autonomous vehicle safety

## **ACCOLADES 20-21**

#### **NSF CAREER AWARD**

Aleksandra Korolova, Haipeng Luo, Heather Culbertson, Jyo Deshmukh, Xiang Ren

#### ACM DISTINGUISHED **MEMBERS**

Jernej Barbic, Yan Liu

#### AAAS FELLOWS

Yolanda Gil, Leana Golubchik

ACM FELLOWS Sven Koenig, Maja Matarić, Michael Zyda

**IEEE FELLOWS** Yolanda Gil, Craig Knoblock

# **ONGOING RESEARCH - \$7 MILLION RESEARCH EXPEDITURES (FY 20-21)**

Improving Human-Robot Synthesis of Quantitative NeuroDB: A Neural Network **Detecting and Repairing** Network-Enabled Framework for Efficiently Answering Database Queries Approximately Collaboration on Assembly Tasks by Anticipating Human Actions **Network Analytics: From** Accessibility Failures in **Cooperative Perception** Left-of-Launch to Right-of-Boom Web Applications for Future Autonomous PIs: Stefanos Nikolaidis (Computer Science), SK Gupta (Aerospace and Mechanical Engineering) Vehicles PIs: Mukund Raghothaman, PI: William Halfond PI: Ramesh Govindan Jyo Deshmukh, Srivatsan Ravi, PI: Cyrus Shahabi Michael Collins (ISI) National Science Foundation: National Science Foundation: National Science Foundation: \$750,000 \$495,774 \$606,637 \$749,693 NOTABLE ACHIEVEMENTS



Top game design program for undergraduates awarded to USC Games, Princeton Review



In the world based on publications, Guide2Research

Increase in student

population since 2015



NSF CAREER awards held by current faculty

# EXPANDING EXPERTISE: FOUR NEW FACULTY MEMBERS

**ROBIN JIA** Ph.D. Stanford University



Natural language processing, robustness, machine learning

JESSE THOMASON Ph.D. University of Texas at Austin



Language grounding and natural language processing for robotics VATSAL SHARAN Ph.D. Stanford University



theoretical computer science

#### SWABHA SWAYAMDIPTA

Ph.D. Carnegie Mellon



Biases and interpretability in natural language processing (starting August 2022)

#2 Online computer science graduate program, US News and World Report



Machine learning, statistics,