

Graduate Engineering Programs

FALL 2023

1

Please direct your attention to the short presentation (15 minutes)

2

Ask questions using the **Q&A window after the presentation**

3

Announcements and links will be made in the **Chat** window. Do not use for questions

Zoom sessions: Please login with your name, not "anonymous attendee" so we can more effectively answer your questions

The image is a composite of two photographs. The top photograph shows a black metal gate with a brick pillar on the right. A sign on the gate reads 'USC University of Southern California'. In the background, a large, multi-story brick building is visible. The bottom photograph shows the USC Viterbi School of Engineering building, a modern structure with a red brick facade and white columns. A sign on the building reads 'USC Viterbi School of Engineering'. Below the main sign, it says 'EPSTEIN FAMILY ENGINEERING PLAZA'. There are some people and a bicycle in the foreground.

Graduate Programs: Engineering and Computer Science

Sept 2023

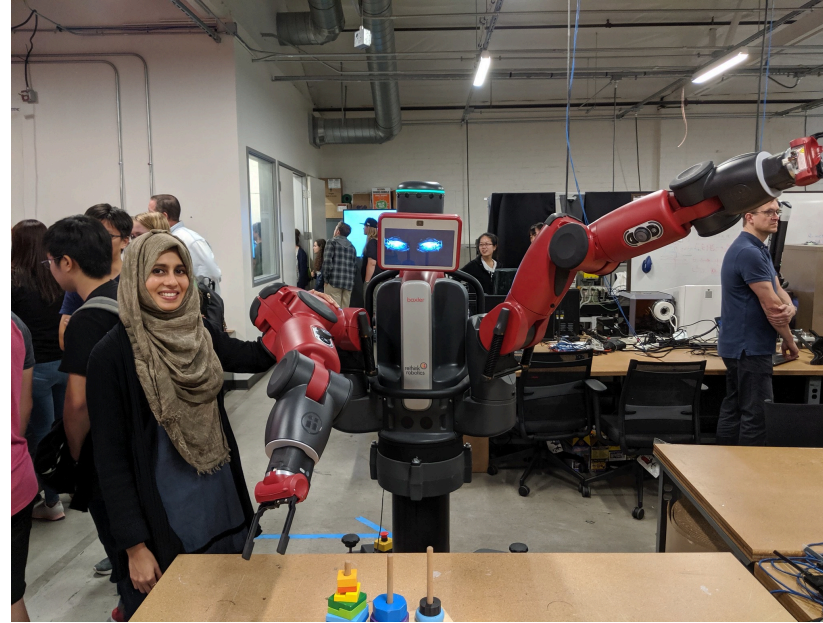
Zuhui An
Assistant Director, East Asia Office
USC Viterbi School of Engineering



Welcome to
Southern
California!

University of Southern California

- ▶ Located in Los Angeles
- ▶ One of the world's leading private research universities
- ▶ Oldest private research university in the western U.S.
- ▶ 22 academic schools and divisions
- ▶ Diverse student population
- ▶ 450,000+ alumni worldwide



A wide-angle photograph of a busy Hollywood Boulevard street scene during the "golden hour" of sunset. The sky is a warm, hazy orange, and the sun is low on the horizon, creating a soft, diffused light. Tall palm trees line both sides of the street, their fronds silhouetted against the bright sky. The street is filled with a variety of vehicles, including cars, vans, and a red Starline tour bus. Pedestrians are crossing the street at a crosswalk in the foreground. On the left, a large sign for "NEY TO SPACE" is visible, along with a "HOLLYWOOD" sign. On the right, a "WAX" sign and a "JULIA SPACE" sign are visible. The overall atmosphere is vibrant and bustling, capturing the essence of a major city street at dusk.

WELCOME TO LOS ANGELES

LOS ANGELES, CALIFORNIA

- ▶ Global center for the arts, technology and international business
- ▶ Fourth largest tech industry in the United States
- ▶ One of the top startup ecosystems in the world
- ▶ Hires more engineering graduates than any other city



The image features a large, multi-tiered stone fountain in the foreground with several water jets. In the background, there are lush green trees and a large, modern building with a grid-like facade. A semi-transparent white rectangular box is centered over the image, containing the text 'USC Viterbi' in a large serif font, with 'USC' in red and 'Viterbi' in black. Below this, the text 'School of Engineering' is written in a smaller black serif font.

USC Viterbi

School of Engineering

GLOBAL DIVERSITY



The Viterbi School strives to be a national and international leader for producing high-quality, diverse engineering professionals interested in improving the quality of life for people all over the world.



THE VITERBI SCHOOL

Founded in

1905>>

2,900 Undergrad

6,300 Graduate

8 Academic Departments

70 Master's Programs

13 PhD Programs

313

Full Time Faculty

88,000

Engineering Alumni Worldwide

Annual Research Expenditure

over
\$213,000,000

38 Research Centers and a
Leader in Funded Research

ACADEMIC DEPARTMENTS



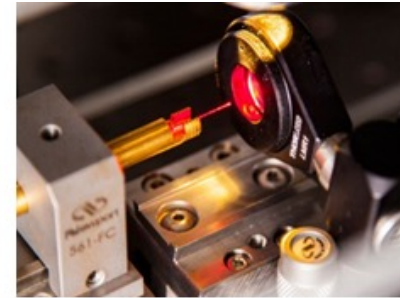
**Aerospace &
Mechanical Engineering**



**Astronautical
Engineering**



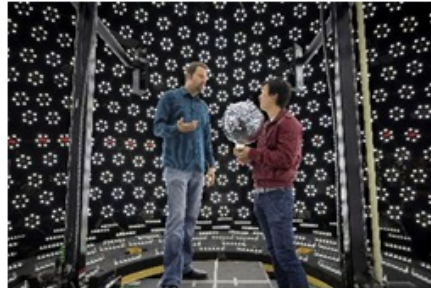
**Biomedical
Engineering**



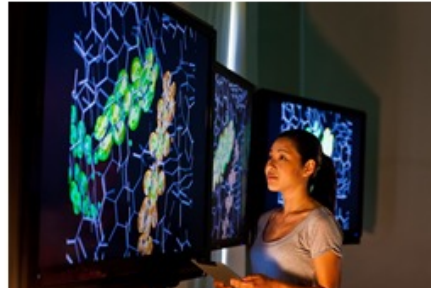
**Chemical & Petroleum
Engineering and
Materials Science**



**Civil & Environmental
Engineering**



**Computer Science
& Data Science**



**Electrical & Computer
Engineering**



**Industrial & Systems
Engineering**

DATA SCIENCE

In collaboration with USC's schools of communication, public policy, sciences, and medicine, the Viterbi School now offers Master of Science programs in Data Science, many of which are open to students who have backgrounds outside of engineering.



Healthcare Data Science



Public Policy Data Science



Communication Data Science



Applied Data Science



Environmental Data Science



Spatial Data Science

MASTER'S PROGRAM

- ▶ Enhance your expertise in a specific discipline
- ▶ Apply your education to working in industry
- ▶ Master's programs generally takes 1.5 to 2 years to complete (7-11 courses)
- ▶ Course-based program (lecture, discussion, lab)



MASTER'S APPLICATION REQUIREMENTS

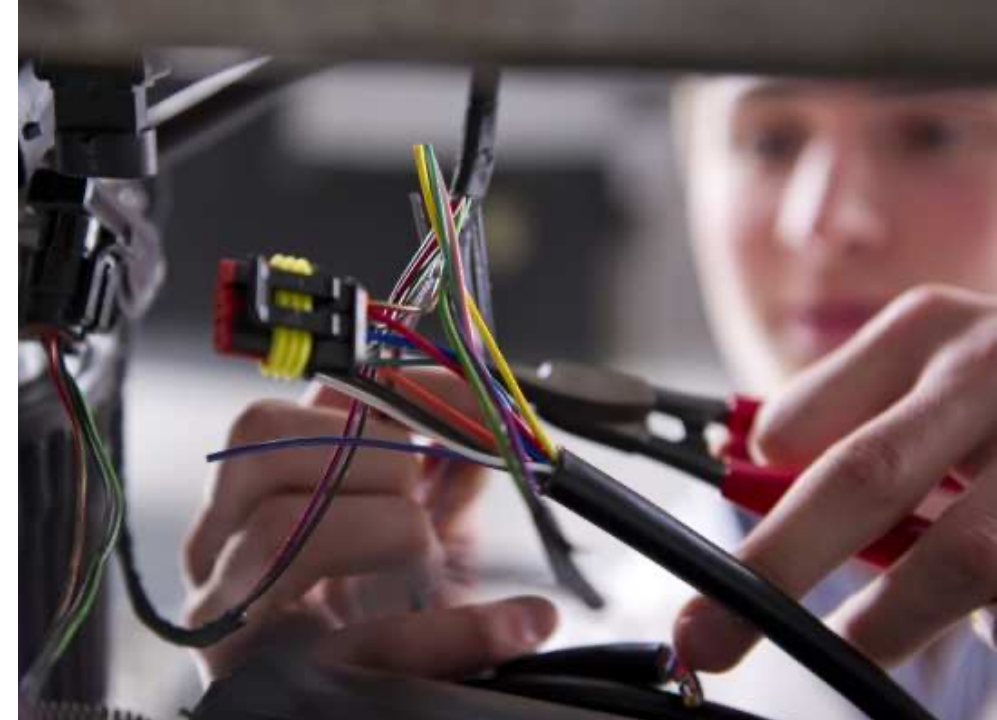
- ▶ BS degree in engineering/computer science, math, or hard science
- ▶ Online Application + \$90 Application Fee
- ▶ Official Transcripts – electronic copy uploaded into application
- ▶ Resume/CV and Personal Statement
- ▶ Letters of Recommendation for some programs
- ▶ GRE is not required

INTERNATIONAL STUDENT ADDITIONAL REQUIREMENTS:

- ▶ TOEFL or IELTS

DOCTORAL PROGRAM

- ▶ Prior experience and strong interest in research
- ▶ PhD programs generally takes 5-6 years to complete
- ▶ USC aims to fully fund all PhD students
- ▶ Admission decisions made by Faculty Committee, and are contingent on the match between you and a faculty member



RESEARCH

- Bio-Inspired Engineering
- Computational Eng.
- Design & Manufacturing
- Dynamical Systems & Controls
- Robotics
- Solid & Applied Mechanics

- Advanced Spacecraft Propulsion
- Microsatellites
- Space Plasmas
- Space Exploration
- Space Sciences
- Space Instrumentation
- Spacecraft Technologies

- Biomed. Microsystems
- Imaging Methods & Algorithms
- Nanomedicine
- Neural Engineering
- Tissue Engineering
- Ultrasonic Research
- Wearable Devices

- Nonlinear Materials
- Induced Seismicity Research
- Materials Nanotechnology
- Composites & Composite Structures
- Superlattices

Aerospace & Mechanical Eng.

Astronautical Engineering

Biomedical Engineering

Chemical, Materials & Petroleum Eng.

Civil & Environmental Eng.

Computer Science & Data Science

Electrical & Computer Eng.

Industrial & Systems Eng.

- Airborne Particle Research
- Earthquake Source Mechanism
- Human-Building Interactions
- Water Reuse & Desalination

- Artificial Intelligence
- Computer Vision
- Human-Robot Interaction
- Post-Quantum Cryptography
- Privacy-Preserving Systems
- Social Network Analysis

- Bio-Electrics & Bio-Optics
- Dynamic Games
- Micro Electrical-Mechanical Systems
- Photorefractive Devices
- Quantum Computing
- Security & Privacy
- VLSI Design

- Decision Analysis
- Healthcare Policy & Operations
- Machine Learning
- Manufacturing & Design
- Optimization & Systems Modeling

New UV-Responsive Material

Polymorphic Robotics

USC's Quantum Computer

Drinking Recycled Water

Parylene Sheath Electrode

PHD APPLICATION REQUIREMENTS

1. BS degree in engineering/computer science, math, or hard science
2. Online Application + \$90 Application Fee
3. Official Transcripts – electronic copy uploaded into application
4. Résumé/CV
5. Supplemental Materials – Personal Statement, 3 LORs
6. Demonstrated research ability
7. GRE is not required

INTERNATIONAL STUDENTS ADDITIONAL REQUIREMENTS:

8. TOEFL or IELTS

APPLICATION DEADLINES

Objective	Term	Deadline
MS	Fall	December 15
PhD	Fall	December 15*
MS	Spring	September 15

- ▶ Spring term begins: **Early January**
- ▶ Fall term begins: **Late August**

*All PhD applicants are automatically considered for funding.

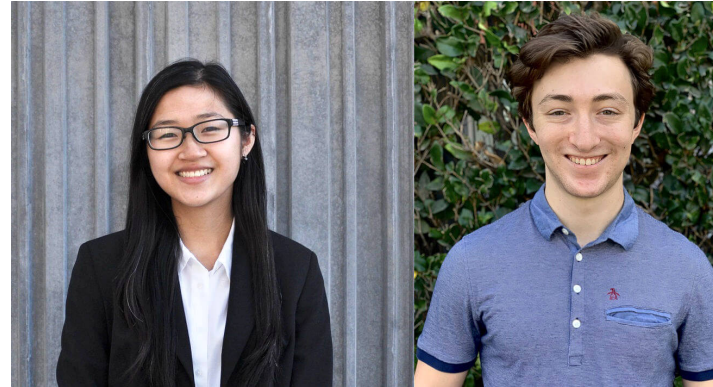
SCHOLARSHIPS

UNIVERSITY OF SOUTHERN CALIFORNIA



ISI RISING STAR INTERNSHIP

- ▶ Part-time, paid internship for incoming MS students at world-class research institute, Information Sciences Institute
- ▶ Areas of interest available to interns:
 - ▶ Artificial Intelligence and Knowledge Technologies
 - ▶ Data Science and Machine Learning
 - ▶ Natural Language Understanding
 - ▶ Cybersecurity & Networking
 - ▶ Novel Computer Architectures and Systems
 - ▶ Microelectronics and Electronic Systems
 - ▶ Quantum Computing
- ▶ Preference given to:
 - ▶ Students applying to Computer Science, Data Science, and Electrical & Computer Engineering MS programs
 - ▶ Demonstrated research experience
 - ▶ Exceptional academic background











2020-21 ISI Rising Star Interns Erin Szeto and Nicholas Klein

Learn more about ISI:
isi.edu

OUR STUDENT AMBASSADORS


Have a question about student life, courses, graduate student life, living in Los Angeles? Chat with our talented student ambassadors!

 Divya Biomedical Engineering Chat with Divya	 Yiran Electrical Engineering Chat with Yiran	Active 2 hours ago  Swarnita Applied Data Science Chat with Swarnita	Active 6 hours ago  Matheus Applied Data Science Chat with Matheus
<p>I COME FROM Sherman Oaks, Los Angeles, CA, USA </p> <p>PREVIOUS QUALIFICATION Biomedical Engineering</p> <p>ABOUT ME Hello! I'm a PhD student in the Laboratory for Living Systems Engineer...</p> <p>Read more about Divya ...</p>	<p>I COME FROM Qinhuangdao, Hebei, China </p> <p>PREVIOUS QUALIFICATION Electrical Engineering</p> <p>ABOUT ME Hi! I'm Ethan, a friendly guy who graduated from Beijing University of...</p> <p>Read more about Yiran ...</p>	<p>I COME FROM Mumbai, Maharashtra, India </p> <p>PREVIOUS QUALIFICATION Electronics and Telecommunications Engineering</p> <p>ABOUT ME Hello! I'm Swarnita. I'm a Graduate student pursuing my MS in Applied ...</p> <p>Read more about Swarnita ...</p>	<p>I COME FROM Novo Hamburgo - RS, Brazil </p> <p>PREVIOUS QUALIFICATION Industrial Engineering</p> <p>ABOUT ME Hey there! I'm Matheus, and I'm from Brazil. It is my second time her...</p> <p>Read more about Matheus ...</p>

Chat with our student ambassadors:
viterbigradadmission.usc.edu/programs/masters/student-life

OUR STUDENT AMBASSADORS

- ▶ Chat with our student ambassadors:
- ▶ [Viterbigradadmission.usc.edu/programs/masters/student-life](https://viterbigradadmission.usc.edu/programs/masters/student-life)



Kiran
Engineering Management


Chat with Kiran

ACADEMIC LIFE

FAVORITE COURSES
Lean Operations · Engineering Project Management · Global Supply Chain Management

PREVIOUS QUALIFICATION
Electronics and Telecommunications Engineering

SOCIAL LIFE

HOMETOWN
Mumbai, Maharashtra, India 

HOBBIES & INTERESTS
Socialising - Music - Travel - Binge-watching TV shows - Petting every dog & cat

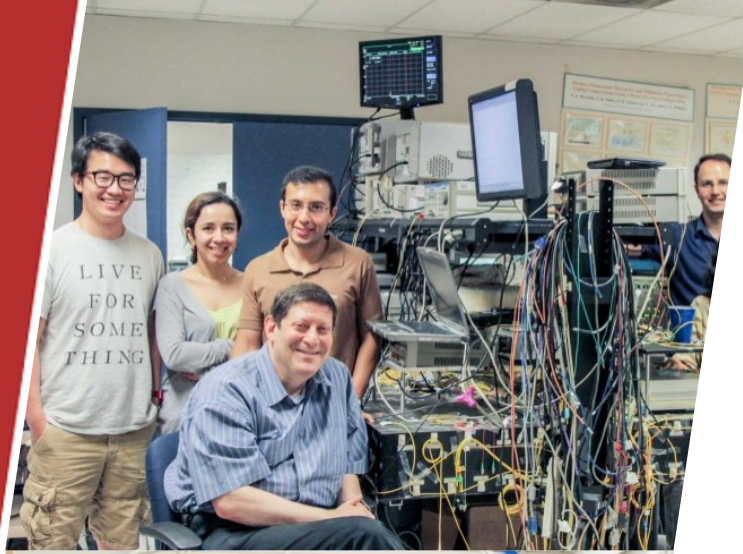
CLUBS & SOCIETIES
Viterbi Graduate Student Association

ABOUT ME

Hello, I'm Kiran! I am a first year graduate student pursuing my masters in Engineering Management with a focus on Operations and Supply Chain Management. I have a prior work experience of 4 years in Siemens India as a Sales and Business Development Professional. Apart from this, I am a social butterfly; I love interacting with people and making new friends. I look forward to chatting with you guys.

FREQUENTLY ASKED QUESTIONS

- I have a 3.5 GPA. Can I get admitted?
- I took the GRE exam – may I submit my scores even if not required?
- Do I need to contact a faculty member before applying to PhD?
- I don't have an undergraduate degree in computer science, but I'd like to apply for the MS in CS. What should I do?
- Are there TA/RA opportunities for MS students?
- Where can I find career information and tuition/estimated cost of attendance?



Contact Us!

viterbi.gradadmission@usc.edu

Visit uscengineer.com

Questions?

