Julia Di

U.S. Citizen | 566 Arguello Way, Apt 254 Stanford, CA 94305, USA
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EDUCATION

Stanford University, Stanford, CA, USA
Ph.D. in Mechanical Engineering | Minor in Entreprenuership — Sep 2018 – Jun 2024
Courses: Advanced Robotic Manipulation, Multi-Limbed Manipulation, Deep Learning, Applied Machine Learning, ME218: Mechatronics, Building an Aerospace Startup

Columbia University, New York, NY, USA
B.S. in Electrical Engineering | Minor in Computer Science — Aug 2014 – May 2018
GPA: 3.90 / 4.00 | *Magna Cum Laude*

WORK EXPERIENCE

NASA Jet Propulsion Laboratory, Pasadena, CA, USA
NASA Space Technology Research Fellow (NSTRF) — Jun 2019 – Aug 2019
• Design inherently flexible fold angle detection sensors for origami-inspired robots

Generation Orbit Launch Services, Inc., Atlanta, GA, USA
Brooke Owens Fellow — May 2018 – Jul 2018
• Designed flight computer and other key circuit boards for hypersonic Air Force rocket X-60A

Lockheed Martin Space Systems, Sunnyvale, CA, USA
Electro-Optical Engineering Research Intern — Jun 2017 – Aug 2017
• Developed algorithms on FPGAs for aerial realtime onboard image processing capabilities

NASA Marshall Space Flight Center, Huntsville, AL, USA
Robotics Academy Research Associate — Jun 2016 – Aug 2016
• Designed and tested a 3 DOF robotic arm with electrostatic gripper to capture orbital debris

RESEARCH EXPERIENCE

Biomimetics and Dexterous Manipulation Lab, Stanford University
NASA NSTRF Graduate Fellow, Mechanical Engineering Department — Dec 2018 – present
• Developing tactile sensors and multimodal sensor algorithms for robotic perception

CHARM Lab, Stanford University
NASA NSTRF Graduate Fellow, Mechanical Engineering Department — Sep 2018 – Dec 2018
• Building a soft sensor array for detecting finger location on a multimodal haptic skin

Creative Machines Lab, Columbia University
Undergraduate Research Assistant, Mechanical Engineering Department — Sep 2016 – May 2018
• Built a 3D-printed quadruped with image recognition capabilities as a machine learning platform

Columbia Laboratory for Unconventional Electronics, Columbia University
Undergraduate Research Assistant, Electrical Engineering Department — Jan 2015 – May 2015
• Designed and constructed an ion sputterer to microfabricate thin-film bulk acoustic resonators

SELECTED LEADERSHIP EXPERIENCE

Columbia Space Initiative, Columbia University
Co-Founder and Co-President — Sep 2015 – Mar 2017
• Accepted to three technical NASA challenges and featured in University's Fall 2016 magazine

Women in Computer Science, Columbia University
President — Apr 2015 – May 2018
• Through WiCS mentorship and scholarship efforts, department became 45% female in Fall 2017

Columbia MakerSpace, Columbia University
Superuser — Apr 2016 – May 2018
• Responsible for weekly office hours to teach students about prototyping and 3D printing skills

HONORS & AWARDS

TVF Entrepreneurial Leaders Fellow, Stanford University — Nov 2018 – Jun 2019
Brooke Owens Fellow, Brooke Owens Fellowship — Jan 2018
King's Crown Leadership and Excellence Award, Columbia University — Apr 2017
Aviation Week's Top 20 Twenties Laureate, Aviation Week Magazine — Feb 2017

LANGUAGES

Python • Julia • C/++ • Verilog • VHDL • MatLab • LaTeX • HTML • Java • LabView

SKILLS

3D Printing • Deep Learning • Git • Machine Learning • Microcontrollers • PCBs • Perception