Julia Di

U.S. Citizen | 70 Morningside Dr, New York, NY 10027, USA julia.di@columbia.edu | www.julia-di.com | (301) 906-6221 **OBJECTIVE** I am a graduating senior looking for a hardware summer internship (going to graduate program). **EDUCATION** Columbia University, New York, NY, USA B.S. in Electrical Engineering | Minor in Computer Science Aug 2014 – May 2018 Cumulative GPA: 3.87 / 4.00 (Dean's List all semesters) Courses: Classical Controls, Digital Signal Processing, Communication Systems, Advanced Programming (C/C++), Data Structures (Java), Circuit Analysis, Solid State Devices, Digital VLSI **SELECTED** Lockheed Martin Space Systems, Sunnyvale, CA, USA WORK **Electro-Optical Engineering Intern** Jun 2017 – Aug 2017 **EXPERIENCE** • Developed computer vision algorithms on FPGAs for aerial onboard processing capabilities NASA Marshall Space Flight Center, Huntsville, AL, USA Robotics Academy Research Associate Jun 2016 – Aug 2016 • Designed, built, and tested a 3 DOF robotic arm with electrostatic gripper to capture orbital debris Developed electronics and control algorithms, and tested with air bearings on MSFC's flat floor Carleton Laboratory, New York, NY, USA Undergraduate Laboratory Assistant May 2015 – Aug 2015 • Machined hundreds of samples of novel composite structure for infrastructure use by client request • Analyzed and wrote 300+ pages of final report for client with graduate student project leader Creative Machines Lab, Columbia University **SELECTED** RESEARCH Undergraduate Research Assistant, Mechanical Engineering Department Sep 2016 – present **EXPERIENCE** • Supervisors: Professor Hod Lipson, Joni Mici • Built a 3D-printed quadruped with image recognition capabilities as a machine learning platform Sia Lab, Columbia University Undergraduate Assistant, Biomedical Engineering Department Sep 2015 - Dec 2015 • Supervisors: Professor Samuel Sia, Ninna Rossen Designed a device through rapid prototyping to automate manufacture of a novel cell therapy Columbia Laboratory for Unconventional Electronics, Columbia University Undergraduate Research Assistant, Electrical Engineering Department Jan 2015 – May 2015 • Supervisors: Professor Ioannis (John) Kymissis and Hassan Edrees • 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

- \bullet Organizes keynote speaker events, workshops, and technical space projects for 60+ members
- \bullet Winner of Zvi Galil Award for Improvement in Engineering Student Life in Spring 2017

Women in Computer Science, New York, NY, USA

resident Apr 2015 – present

• Initiate and manage events with tech companies and startups to promote women in tech

Columbia MakerSpace, Columbia University

Superuser Apr 2016 – present

• Responsible for weekly office hours to teach students about prototyping and 3D printing skills

Formula SAE (Knickerbocker Motorsports), New York, NY, USA

Electronics and Carbon Fiber Engineer

Sep 2015 – Sep 2016

• Design electronics, integrate sensors, manufacture foam molds, and perform carbon fiber lay-ups

HONORS & AWARDS

Women in Aerospace Scholarship, Women in Aerospace Foundation

Aug 2017

Aviation Week's Top 20 Twenties Award, Aviation Week Magazine

Dec 2016

Raytheon Robotics Scholarship, Raytheon Company

Aug 2014, Jul 2016, Aug 2017

LANGUAGES

Python • C/++ • Verilog • VHDL • MatLab • LATEX • HTML • Java • LabView

SKILLS 3D Printing • Amateur Radio • Cadence • FPGAs • Git • Microcontrollers • PCBs • Soldering