Julia Di

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EDUCATION

Columbia University, New York, NY, USA
B.S. in Electrical Engineering | Minor in Computer Science — Aug 2014 – May 2018
Cumulative GPA: 3.85 / 4.00 (Dean's List all semesters)
Courses: Classical Controls, Signals and Systems, Communication Systems, Advanced Programming (C/C++), Data Structures (Java), Circuit Analysis, Electronic Circuits, Solid State Devices

SELECTED WORK EXPERIENCE

Lockheed Martin Space Systems, Sunnyvale, CA, USA
Summer Intern — Jun 2017 – Aug 2017

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 an electrostatic end effector to capture orbital debris
• Responsible for electronics and control algorithms, and tested robot 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 use in infrastructure by client request
• Analyzed and wrote 300+ pages of final report for client with graduate student project leader

SELECTED RESEARCH EXPERIENCE

Creative Machines Lab, Columbia University
Undergraduate Research Assistant, Mechanical Engineering Department — Sep 2016 – present
• Supervisors: Professor Hod Lipson, Joni Mici
• Program a deep learning neural network on a Raspberry Pi for on-robot object recognition from a camera

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, programmed, and constructed an ion sputterer to microfabricate thin-film bulk acoustic resonators

SELECTED LEADERSHIP EXPERIENCE

Columbia Space Initiative, Columbia University
Cubesat Electronics Lead — Feb 2017 – present
Co-Founder and Co-President — Sep 2015 – Feb 2017
• Organizes keynote speaker events, seminars, workshops, and technical space projects for 60+ members
• Led cubesat team in 2015 - 2016 with Professor Ioannis (John) Kymissis
• Accepted to three technical NASA challenges and featured in University's Fall 2016 magazine

Columbia MakerSpace, Columbia University
Superuser — Apr 2016 – present
• Responsible for weekly office hours to teach students about prototyping, 3D printing, and maker 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
Vice President — Sep 2014 – May 2015
• Manage operations and logistics for 50-member engineering team building two race cars in single year
• Write, compile, and cross-check two 200-page extensive spending budgets of $60,000

Women in Computer Science, New York, NY, USA
Corporate Chair — Apr 2015 – present
• Initiate and manage events with tech companies and startups to promote women in engineering

IEEE Columbia, New York, NY, USA
Board Member — May 2015 –
• Plan hardware-related initiatives such as Columbia's only hardware hackathon, MakeCU

HONORS & AWARDS

Aviation Week's 20 Twenties Award, Aviation Week Magazine — Dec 2016
• Identified as next-generation leader in aerospace engineering research and development
• One of only 20 laureates selected from an international pool

Raytheon Robotics Scholarship, Raytheon Company — Aug 2014, Jul 2016
• $1,000 scholarship for outstanding participants in FIRST robotics (40 scholars nationwide)
• High school robotics team placed 2nd at 2014 FIRST Robotics World Championships

NASA WISH Aerospace Scholar, NASA — Jan 2013
• One of only 50 students nationwide selected based on leadership, scholarship, and passion for aerospace

LANGUAGES C • C++ • CSS • HTML • Java • MatLab • LabView • LaTeX • Python

SKILLS 3-D Printing • Amateur Radio (Tech Class) • Git • Microcontrollers • PCBs • SolidWorks • Soldering