**Julia Di**

U.S. Citizen | 70 Morningside Drive[, New York, NY 10027, USA](https://maps.google.com/maps?q=1900+Lerner+Hall,+NYC,+New+York+10027,+USA)

julia.di@columbia.edu | <https://linkedin.com/in/JuliaDi> | (301)906-6221

|  |  |
| --- | --- |
| **EDUCATION** | [**Columbia University**](http://www.columbia.edu/), New York, NY, USA  B.S. in [Electrical Engineering](http://www.engineering.columbia.edu/) | Minor in Computer Science Aug 2014 – May 2018  Cumulative GPA: 3.87 / 4.00 (Dean’s List all semesters)  Courses: Classical Controls, Signals and Systems, Digital Signal Processing, Advanced Programming (in C/C++), Data Structures (in Java), Electronic Circuits, Circuit Analysis, Digital VLSI |
| **SELECTED**  **WORK**  **EXPERIENCE** | [**Lockheed Martin Space Systems**,](http://academy.msfc.nasa.gov/robotics/) Sunnyvale, CA, USA  Electro-optical Engineering Intern June 2017 – Aug 2017   * Developed computer vision algorithms on FPGAs for aerial onboard processing capabilities   [**NASA Marshall Robotics Academy**,](http://academy.msfc.nasa.gov/robotics/) Huntsville, AL, USA  Research Associate June 2016 – Aug 2016   * Designed, built, and tested a 3 DOF robotic arm with an electrostatic gripper to capture orbital debris * Created electronics and control algorithms, and learned how to implement wireless control on the job   [**Carleton Laboratory**,](http://carleton.columbia.edu/) New York, New York, USA  Undergraduate Laboratory Assistant May 2015 – Aug 2015   * Machined hundreds of samples of novel composite structure for use in infrastructure * Designed and conducted multiple ASTM-standardized material property tests for a 300+ page report |
| **SELECTED**  **RESEARCH**  **EXPERIENCE** | [**Creative Machines Lab**](http://www.creativemachineslab.com/), 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 object recognition from live video   [**Sia Lab**](https://synaptic.nyc/organizations/sialab), 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**](http://www.kymissis.columbia.edu), Columbia University  Undergraduate Research Assistant, Electrical Engineering Department Jan 2015 – May 2015  Supervisors: Professor Ioannis (John) Kymissis and Hassan Edrees   * Designed and built an ion sputterer to microfabricate thin-film bulk acoustic resonators |
| **PUBLICATIONS** | 1) [J. Di, “The Satellite Assessment of Impact of 2012 Great Drought on Corn Growth in the US Corn Belt,” in](http://ieeexplore.ieee.org/xpl/login.jsp?reload=true&tp=&arnumber=6621877&url=http%3A%2F%2Fieeexplore.ieee.org%2Fiel7%2F6603437%2F6621864%2F06621877.pdf%3Farnumber%3D6621877) [*Proceedings of the International AgroGeoinformatics Conference*, Fairfax, VA, Aug 2013.](http://ieeexplore.ieee.org/xpl/login.jsp?reload=true&tp=&arnumber=6621877&url=http%3A%2F%2Fieeexplore.ieee.org%2Fiel7%2F6603437%2F6621864%2F06621877.pdf%3Farnumber%3D6621877) |
| **LEADERSHIP**  **EXPERIENCE** | [**Columbia Space Initiative**,](http://columbiaspace.org) New York, New York, USA  Co-Founder and Co-President Sep 2015 – present   * Organizes keynote speaker events, workshops, and technical space projects for 60+ members * Led cubesat technical project in 2015 - 2016 with Professor Ioannis (John) Kymissis * Accepted to three technical NASA challenges and featured in University’s Fall 2016 magazine   [**Women in Computer Science**,](http://cuwics.github.io/) New York, NY, USA  President Apr 2015 – present  Initiate and manage events with tech companies and startups to promote women in engineering  [**Columbia MakerSpace**,](http://make.columbia.edu/) Columbia University  Superuser Apr 2016 – present   * Responsible for weekly office hours to teach prototyping, 3D printing, and maker skills   [**Formula SAE (Knickerbocker Motorsports)**,](http://www.columbiafsae.org/) 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   * Managed operations 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 |
| **HONORS &**  **AWARDS** | **Aviation Weekly’s Twenty 20s Award**, Aviation Magazine Dec 2016   * Awarded for leadership and research potential in the aerospace industry (20 scholars internationally)   **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 |
| **LANGUAGES** | C • C++ • CSS • HTML • Java • MatLab • LabView • LATEX • Python |
| **SKILLS** | 3-D Printing • Amateur Radio (Tech Class) • Git • Microcontrollers • PCBs • SolidWorks • Soldering |