

MOHAR KALRA

973.997.4062 • mk4178@columbia.edu • U.S. Citizen • www.linkedin.com/in/mohar-k • mkalra.me

SUMMARY

Design-oriented engineering student and artist fascinated by technology's ability to transform the way people interact with their world. Recognized for curiosity and initiative in Jabil internship and interactive media research. Seeking to leverage proven technical, aesthetic and management skills to develop ergonomic products and experiences that vitalize each user's reality.

EDUCATION

Columbia University in the City of New York

New York, NY

- Bachelor of Science in Electrical Engineering; GPA: 4.06

May 2021

Georgia Institute of Technology

Atlanta, GA

- Bachelor of Science in Electrical Engineering; GPA: 4.00

August 2017 – May 2018

Millburn High School

Millburn, NJ

- Valedictorian, National Merit Scholar; GPA: 4.47

June 2017

WORK EXPERIENCE

MORPHOLIO APPS

New York, NY

Independent Contractor

September 2018 – Present

- Write Python scripts to automate the manipulation of 3D models in Blender for use in AR iOS apps

JABIL, INC

St. Petersburg, FL

Electrical Design Engineering Intern

May 2018 – August 2018

- Designed, analyzed, programmed, tested and troubleshot four PCBs to meet client requirements for consumer electronics
- Designed, inventoried and constructed 20+ electrical harnesses for high fidelity prototype of home appliance for client
- Designed experiment to test Alexa-enabled assembly's ability to recognize voice commands in various environments

ADAPTIVE DIGITAL MEDIA LAB

Atlanta, GA

Paid Student Researcher under Dr. Brian Magerko

January 2018 – May 2018

- Developed wifi-enabled tangible interfaces for Tunetable platform to teach children programming principles through music
- Used Arduino and Python servers to send and receive data over OSC protocol from tangibles to Tunetable computer
- Designed passive sensing localization method between tangibles interfaces using ATTiny84's and I2C communication

RESEARCH

VIP ROBOSENSE

Atlanta, GA

Student Researcher / Vertically Integrated Project Program

August 2017 – December 2017

- Redesigned and tested internal structures of Autonomous Underwater Robot to improve reliability and user-friendliness

LEADERSHIP

COLUMBIA DAILY SPECTATOR

New York, NY

Staff Illustrator / Columbia's Independent Student Newspaper

September 2018 – Present

- Interface between writers and editors to ideate, illustrate and color graphics for weekly long-form journalism articles

ARTHACKS

Atlanta, GA

Budget Manager / Georgia Tech's First 24-hour Art Hackathon

January 2018 – March 2018

- Managed \$2,300 budget to supply meals and complimentary art supplies for attendees
- Procured 240 free and discounted meals from 7 Atlanta Restaurants to provide complimentary meals for the 40 attendees

SKILLS

Engineering: Robotics, CAD, interactive media, IoT, SolidWorks, Java, Matlab, Javascript, Arduino, VBA, CSS and HTML, digital system design, analog circuit design, 3D Printing, Python, product design, wireless communication, open frameworks (novice), OSC, PCB debugging, Raspberry Pi, Amazon Voice Services, PCB design, electronics testing and verification, Altium Designer, VLANs, C++, Blender

Communication: Technical document writing, data presentation, public speaking, Word, Excel, Powerpoint, event planning

Arts: Sequential art, graphic design, illustration, film production, screenwriting, directing, Adobe Creative Suite

Languages: English (Native), Spanish (Intermediate)