

JOSHUA D. SOLOMON

✉ jdsolomo@usc.edu

☎ (412) 680-9243

📍 Pittsburgh, PA

🌐 <https://joshuasolomon.tech/>

EDUCATION

UNIVERSITY OF SOUTHERN CALIFORNIA, Los Angeles, CA
Electrical and Computer Engineering, B.S. GPA: 3.90/4.00

Aug 2018 – May 2022

EXPERIENCE

Research Assistant, Autonomous Networks Research Group Dec 2019 – Present
Design, develop, and test autonomous robotics networks using TurtleBot3 Burger bots to highlight new imaging and communication techniques on the lunar surface

Course Producer, USC Viterbi School of Engineering Aug 2019 – Dec 2019
Aid over 60 students in their study of linear algebra as it relates to electrical engineering through instruction of basic theorems and definitions and the use of MATLAB to visualize vector and matrix operations

Academy Coach, USC Viterbi School of Engineering Aug 2019 – Dec 2019
Advise 32 freshmen engineers on professional expectations, academic opportunities, social development, and general issues that arise over the 14-week course

Intern, The Citizen Science Lab May 2019 – Aug 2019
Developed and deployed the first week-long curriculum at The Citizen Science Lab focusing on the principles of computer architecture, basic physics, and the C++ coding language to urban youth and teenagers

Intern, Concepts Management Group May 2019 – Aug 2019
Automated several key data entry and manipulation processes using VBA for Excel and Word and created a low-cost inventory system using VBA for Excel with barcode generation and which currently houses over 500 products

LEADERSHIP

Academic Director, IEEE USC Student Chapter May 2019 – Present
Integrate electrical engineering curricula and technical skills through 10 events including hackathons, lectures, and workshops

Recruitment Coordinator, Theta Tau May 2019 – Present
Handle a budget of \$1200 to advertise the nationally recognized co-ed engineering fraternity, Theta Tau, to underclassmen

Member, WVT Rusch Undergraduate Engineering Honors Program May 2019 – Present

PROJECTS

Quadcopter
Designed, built, constructed, and tested a quadcopter drone utilizing 3-D Printing and SolidWorks in conjunction with an Electrical and Software team

Inventory Management System
Designed and built a low-cost inventory management software utilizing two API's, Microsoft Excel, and VBA to decrease revenue losses due to misplaced or lost inventory

HTML Light Sensor System
Implemented a home IoT System using Paho MQTT, UDP, and HTTP to alert users about light usage throughout different rooms in their house

SKILLS

VBA, C++, MATLAB, Python, HTML/CSS, Git
Microsoft Office
Instructing (Children and Teenagers)
Arduino Uno, Raspberry Pi

RELEVANT COURSEWORK

IoT, Networks, and Distributed Systems
Embedded System
Physics E/M