Brooks Tawil

tawilbrooks@gmail.com | (732) 887-3263 | Deal, NJ 07723
github.com/tawilbrooks | linkedin.com/in/brookstawil | brookstawil.com

Education

Rutgers University-New Brunswick 09/2015 - 05/2019
B.E. in Electrical and Computer Engineering
B.S. in Computer Science
GPA: 3.68/4.00

Relevant Coursework: Data Structures, Computer Architecture, Discrete Structures, Probability and Random Processes, Circuits I/II, Systems Programming, Algorithm Design

Skills

Advanced: Java, C/C++, Javascript, HTML/ CSS, Bootstrap
Proficient: Ruby on Rails, Python, Matlab, LaTeX, Go, MIPS

Technologies: Google Cloud, AWS, Raspberry Pi, Arduino
Developer Tools: Eagle PCB designer, Android Studio, OrCAD

Experience

Kedma Solar - Junior Developer - Tel Aviv, IL 05/2017 - 08/2017
- Wireframed, implemented and deployed new features to company Android application used by users and technicians in the field
- Submitted and participated in code reviews commits for code during production that reached live users
- Used Ruby on Rails to integrate the backend data server to the front end user experience on multiple platforms
- Debugged and revised PCB designs for a company power meter using Eagle PCB designer for schematic design

Keyboard Learnability under *Professor Janne Lindqvist* **- Research Assistant - New Brunswick, NJ** 01/2017 - 05/2017
- Produced an android keyboard application used to monitor and record data relevant to use of the keyboard in the field
- Ran live field tests involving collection of data regarding the use of the keyboard and analyzed using common statistical methods
- Compiled notes and research into a technical paper using LaTeX following IEEE paper specifications for this project, as well as for the Windows Hello project, each totaling at around 5000 words

Windows Hello under *Professor Janne Lindqvist* **- Research Assistant - New Brunswick, NJ** 01/2016 - 01/2017
- Ran usability studies and tests on the Windows Hello biosecurity protocol using iris, fingerprint and facial recognition
- Attempted to use common biosecurity exploits such as fingerprint recreation and facial spoofing to exploit
- Created a Matlab program for accurately grabbing fingerprint edge data from a high resolution photograph of a latent print

Tabush Group - Research and Development Intern - New York, NY 05/2015 - 08/2015
- Researched software components related to hosting virtualized instances of a client's desktop in an offsite environment
- Assisted a team of junior and senior developers in creating multiple VM environments for use by various users
- Explored the cost and benefits of various infrastructure and tech stack choices for potential data centers and cloud services

Projects

Swarm Robotics 08/2016 - Present
- Rework existing open source swarm robotics projects by designing, printing and constructing a custom robotics platform
- Collect data demonstrating the efficiency gains made in puzzle solving that a swarm demonstrates in comparison to a single robot

Go LED Stream 08/2016 - 09/2016
- Created a simple interpreter in Go to operate an LED strip using a Raspberry Pi

Automated Seed Planter 10/2015 - 12/2015
- Worked as part of a team of engineers to design a custom seed planter using an Arduino and weather monitoring sensors

Affiliations

Theta Tau - Webmaster 05/2017 - Present
- Built an official website for the Omicron Delta chapter of Theta Tau using HTML/CSS, jQuery, and Bootstrap
- Consulted with members as well as the executive board by wireframing and outlining multiple versions and designs

Sephardic Bikur Holim - Volunteer/Mentor 01/2013 - Present
- Volunteered time to tutoring kids within my hometown for free in subjects such as SAT Test Prep, Computer Science, Math etc.

Awards

Engineering Honors Academy class of 2019

James Dickson Carr Scholarship

School of Engineering Memorial Scholarship

Dean's List through all semesters