Sherveen "Sean" Shokoohi

sshokooh@ucsd.edu ❖ (858)-382-6742 ❖ San Diego, CA ❖ sherv.dev ❖ hackaday.io/SeanS

EXPERIENCE

SPAWAR/NAVWAR **06/2019 – 08/2019**
Software Engineering Intern (Federal Security Clearance Obtained, Sensitive Material Omitted) *San Diego, CA*

- Developer in an agile environment, participated in daily stand ups and contributed to feature planning and implementation
- Full stack development, mobile application interfacing, IOT big data routing/digestion and augmented reality integration
- Trained in ethical hacking, emphasis in defensive cybersecurity measures and penetration testing

NASA JPL **02/2017 – 07/2017**
Microcomputer and Robotics Programming Intern *Pasadena, CA*

- Received award of Special Congressional Recognition by Congressman Scott Peters (52nd district, CA) following a poster symposium
- Designed, wired and programmed an electro-mechanical plotting system from the ground-up
- Wrote custom g-code interpreter library in C to take a stream of commands and articulate an array of synchronous stepper motors
- Engineered a physical interface panel using active and passive circuit elements on top of a custom proprietary serial communication layer that interfaces with an onboard Arduino and a Windows environment

Pedestrian Robotics (Now Σ-motion) **09/2011 – 06/2015**
Software and Electrical Systems Team Lead *San Diego, CA*

- Developed and deployed code on 3 award winning robots
- Taught Java, Labview and motor control theory classes and hosted weekly seminars to guide departments to meet deadlines
- Specialized in developing AI vision tracking using the Microsoft Kinect IR Sensor and WPILib
- Programmed dynamic and autonomous navigation algorithms using a combination of analog and digital sensors
- Integration of motor controllers, sensors and SBC's that communicate with a roboRIO over CAN, PWM and analog channels
- Praised by mentors for devising UI control schemes that reduce operator overhead while maintaining accuracy and responsiveness

TOP HACKATHON AWARDS AND RECOGNITIONS

IEEE Hacks – 1st Place (Team of 4) **2017**
Mesa Hacks – 1st Place (Competed Solo) **2018**

- Also won best software hack and best hardware hack awards

SD Hacks – Judged on behalf of SPAWAR/NAVWAR **2018**

- Recognized by the Deputy of Program Development for my broad scope of talents and skills, such that I was requested to be a judge

NOTABLE PROJECTS

EnviroFlux (Posted on hackaday.io/SeanS)
Open source irrigation for small scale agricultural operations.

- Arduino based state machine, integrates custom analog circuitry to interface digital modules

File Compressor/Decompressor
Uses Huffman Encoding to agnostically compress files.

- Written in C++, offers lossless compression and decompression, designed for use in Unix based systems

EDUCATION

University of California San Diego *B.S. in Computer Engineering* **9/2018 – 6/2021**
San Diego Miramar College *A.S. in Physics* **9/2015 – 6/2018**

LANGUAGES, FRAMEWORKS, TOOLS AND SKILLS

Java, C, C++, Assembly, Git, Shell, VIM, Haskell, Python, Continuous Integration, Jupyter Notebook, HTML, CSS, Javascript, SQL, React, Docker, KAFKA, NIFI, Android Studio, OrCAD, Intel Quartus, MATLAB, Agile, Object Oriented Design, Data Analysis

RELEVANT COURSEWORK

Advanced Data Structures, Advanced Algorithms and Systems Analysis, Theory of Computation, Computer Organization and Systems Programming, Software Development Tools and Techniques, Programming Languages: Principles and Paradigms, Software Engineering, Online Database Analytics Applications, Data Science in Practice, Components and Design Techniques for Digital Systems, Digital Signal Processing, Analog/Digital Circuit Design