Shrey Shah

4th Year Electronics Engineer
& Full-Stack Developer

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Core Skills:

OOP and Core Languages: Python3, C++, SQL, ARM Assembly, Bash, Git, Matlab

Products and Frameworks: Docker, ZeroMQ, MariaDB, Google Charts, Bootstrap, Pandas, NumPy, SciPy, BeautifulSoup, AirTable, Figma, Flutter (Android)

Familiarity: JavaScript, React, Electron, Cassandra, Kafka, Pytorch,

Work Experience:

Intern | General Dynamics Missions Systems – Canada:

Software Engineering - Land Systems   April 2020 – Aug 2020
- Developed backend logic (in C++) for position reporting systems following NMEA Standards
- Collaborating with team members on firmware development and hardware testing
- Utilized Robot Framework (Python3) and Google test to create scaled end to end unit tests
- Created two entirely new hardware test pipelines in Jenkins to add systemwide coverage of features.

Full Stack Engineering - Underwater Warfare Systems   Sept 2019 – April 2020
- Responsible for firmware updates
- Built feature to pinpoint and alert user on a sonar platform (Java) used to detect underwater moving entities
- Led development on adding a new UPS and creating initial API to interact with product within system.
- Optimized and created messages to be sent via a custom variant of OpenDDS across systems.
- Designed and implemented layout update of main dashboard with Java Spring and QT GUI (C++)
- Supported adoption of Elasticsearch, Logstash and Kibana on a Linux system, replacing Portainer

Campus STEM Tutor | University of Regina   April 2017 – Aug 2019
- Created a learning environment for students in STEM Courses, resulted in an increase of grades by 15%.

Realtor Assistant | Century 21 Bamber Realty: July 2015 – Aug 2015
- Automated excel spreadsheets with Python and optimized data entry methods.

Projects:

Whac-a-mol | ARM Assembly, STM32F Development Kit
- Created an algorithm to give an incrementally challenging "levels" of randomized LED's turning on to simulate a whac-a-mol carnival game. Included starting sequence, fail state, 3 "Lives" before game ended.

Lyra | HTML5, CSS, JavaScript, AJAX, PHP, SQL, REST Paradigm
- Built from scratch, a website similar to twitter. Allowed for consistent updates and notifications from users.

LabBuddy 5.0 | Hardware Test Board
- Assembled a laboratory testing kit that allowed for easy testability with a Temperature Sensor, Voltage Regulator, Dynamic Resistor, Low Pass Filter, and Relay. This allowed younger students to test circuits without needing to go the lab.

Education:

Electronics Systems Engineering | University of Regina   Sept 2016 - Present