# **Shrey Shah**

4th Year Electronics Engineer & Full-Stack Developer

(306)-450-1976

Core Skills:

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

Products and Frameworks: Docker, ZeroMQ, MariaDB, Google Charts, Bootstrap, Pandas, NumPy, SciPy,

BeautifulSoup, AirTable, Figma, Flutter (Android), Puppet.

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

## Work Experience:

Intern | General Dynamics Missions Systems – Canada:

Software Engineering - Land Systems

April 2020 - Aug 2020

- Synchronized and created 5 system-wide CI/CD Jenkins pipelines, allowing for overnight build runs.
- Designed robust backend logic software for position reporting systems, decreased time for system messages by 60ms.
- Maintained and managed TCP/IP related services for cross-system infrastructure.
- Built automated, end-to-end test suites in both Robot Framework (Python) and Google Test (C++), for architecture reliability.

#### Full Stack Engineering - Underwater Warfare Systems

Sept 2019 – April 2020

- Built scalable product features in C++ and Java, interfacing design daily with key stakeholders and architects.
- Led effort to incorporate and adopt ELK stack for high-frequency data collection. Optimized ability to parse over 5GB of log messages sent from Logstash by using dynamic templates in Elasticsearch.
- Designed and implemented a sonar systems dashboard refresh with QT GUI (C++).
- Maintained and improved resiliency on REST API for a critical UPS system.
- Created a high performance, real-time data exchanging micro service containerized within Docker. Service optimized to decrease memory usage and processor load.

#### Campus STEM and English 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%.

# Projects:

#### Whac-a-mol | ARM Assembly, STM32F Development Kit

- Embedded Programming/Computer Architecture Project. Programmed board to play a Whac-A-Mol arcade game with LED's and buttons. Manipulated GPIO, Stack/Memory Deployment, and Control Structures.

#### Lyra | HTML5, CSS, JavaScript, AJAX, PHP, SQL

- Built from scratch, a twitter-like website. 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.

### **Fducation:**

#### Electronics Systems Engineering | University of Regina

Sept 2016 - Present

Microelectronics, Control Systems, Computer Architecture, FPGA Design, Minor in Computer Science: Object Oriented Programming, Data Structures and Algorithms, Web and Database Development.