Shrey Shah

4th Year Electronics
Engineering Student
& Full Stack Developer

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Core Skills:

Languages: Python, Java, C/C++, JavaScript, ARM Assembly, Bash, SQL, Git

Frontend Technologies: Figma, Electron, React, Redux, Flutter (Android)

Backend and Cloud: Docker, MongoDB, GCP, AWS, Cassandra, MariaDB, Firebase, GraphQL, Kafka, Node.js, PostgreSQL, Elasticsearch, Spring Boot

Work Experience:

Intern | General Dynamics Missions Systems – Canada:

Backend Software Engineering - Land Systems   April 2020 – Aug 2020

- Analyzed 600MB of performance data and other metrics on several sub-services through log files, documented behaviour and implemented optimizations within the codebase.
- Designed robust logic for position reporting systems, decreased time for intra-system messages by 60ms.
- Created microservices for reliable data transfer over TCP for distributed system architecture.
- Built and automated, 5 end-to-end pipelines in both Robot Framework (Python3) and Google Test (C++). Each test case contained well over 10 subarea-specific regression tests.

Full Stack Engineering - Underwater Warfare Systems   Sept 2019 – April 2020

- Built scalable product features in C++ and Java, in an Agile development environment.
- Designed and implemented a sonar systems dashboard with QT GUI (C++), reducing clutter by 30%.
- Overhauled existing log aggregation system with ELK stack, resulting in an increase of usability and reduced error tracking time by 50%.
- Created a high-performance, real-time data exchanging micro service containerized within Docker. Service optimized to decrease memory usage and processor load.
- Optimized ability to parse over 5GB of logs sent from Logstash by using dynamic templates in Elasticsearch.

Campus STEM and English Tutor | University of Regina   April 2017 – Aug 2019

- Created a learning environment for students, increasing grades by 25% across a multitude of subjects.

Projects:

Iconbite 🔗 |React, Firebase, Material-UI

- Built an image repository with modern frameworks like React supported by Material-UI. Includes a scalable NoSQL database via Firestore, allows for up-to 10,000 authentications per month and UHD image upload.

Collagify 🔗 | Python3, Tesseract OCR, OpenCV, PIL

- Leveraged open-source machine learning libraries to search an ingredient list image, clean input data and feed into a image search API to retrieve ingredient-specific images.

Whac-a-mol 🔗| ARM Assembly, STM32Fx Development Kit

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

Education:

BAS in Electronics Engineering, Minor in Computer Science| University of Regina   Sept 2016 – Apr 2022

Microelectronics, Computer Networks, Digital Communications, Computer Architecture, FPGA Design, Object-Oriented Programming, Data Structures and Algorithms, Web Development.