Siddhesh Sawant

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EDUCATION

SIMON FRASER UNIVERSITY
BASc in Computer Engineering
Expected Graduation: Apr 2024
Burnaby, BC

LINKS

Portfolio:// **ssawant0202**
LinkedIn:// **ssawant0202**
Github:// **ssawant0202**
CodeSignal:// **ssawant0202**

COURSEWORK

UNDERGRADUATE
- Object-Oriented Programming
- Data Structures & Algorithms
- Embedded Systems
- Full Stack Applications
- AI

SKILLS

PROGRAMMING
- C/C++
- Python 14
- RISC V
- Java
- Node.js
- React
- Docker
- JavaScript
- VHDL
- Assembly
- Matlab

HARDWARE
- PCB'S
- Arduino UNO/Nano
- Oscilloscopes
- Function Generators
- Op-Amps
- Soldering

TECHNICAL SKILLS
- Testing and Debugging
- Software Development
- Data structures and algorithms
- Object-Oriented Design

OPERATING SYSTEMS
- Linux OS
- Windows
- MAC OS

EXPERIENCE

FAISAL LABS | QA Analyst
Jan 2020 - Apr 2020 | Burnaby, BC
- Wrote python scripts to automate testing and work flow process
- Did functional testing to detect defects, working in an agile environment
- Documented reports for functional tests and python scripts
- Segmented CT Scans which required extreme attention to detail
- Successfully managed time and finished testing & documenting scripting

IT TECHNICIAN | Simon Fraser University
May 2019 – Aug 2020 | Burnaby, BC
- Provided desk and remote support to university staff and students for devices such as laptops, PC's, phones, printers and projectors

PROJECTS

CLOUDNATIVEJS - NODESERVER |Server side logic | JavaScript
- Created an Express.js app using the Express Generator: Deployed at scaling using **Docker**, **Helm** and **Kubernetes**
- Added enhanced capabilities to the app like health-checks, automatic restart, metrics (using OpenTracing and Prometheus)
- Used CSS selectors to verify functionality of basic elements

ARTIFICIAL INTELLIGENCE |Multi Agent Path Finding| Python
- Implemented Safe Interval Path Planning, a faster algorithm than A*
- Developed an algorithm which drastically reduced the state space
- Successfully verified functionality by writing multiple unit test cases

ARTIFICIAL INTELLIGENCE |Affective Computing| Python
- Generated artificial facial expressions based on gender, race and environment. Led a group of 3 to train the AI model producing appropriate Action Units (AUs)
- Trained the AI using GMM and tested the accuracy using K fold cross-validation
- Generated 100 sensible facial expressions and classified them based on Plutchik's Wheel of Emotions

EMBEDDED SYSTEMS |FTP Y-Modem Protocol | C++
- Debugged and corrected the functionality of a multi-threaded socket-pair application.
- Developed state chart & thread table to improve flow structure
- Coded function which eliminated extra characters(noise) stored in socket pairs
- Successfully verified the functionality by through testing of the terminal program

SOFTWARE ENGINEERING I |Android Application | JAVA
- Worked in a small group to simulate an agile environment
- Understood software development life cycle
- Learned all types of Testing and Verification strategies
- Grasped the I&I principles of Inception, Elaboration, Construction, Transition