Curriculum Vitae

Jaiaid Mobin

About Me

I am working as a senior software engineer in BJIT Ltd. I have worked in developing computer vision and deep learning based solution for client project. Currently working in PC application development.

Contact Information

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• Present address: House#20, Rd#24, Sec-7, Uttara, Dhaka-1230, Bangladesh

• Personal Website: https://jaiaid.github.io/

Links

Github https://github.com/Jaiaid

Publications Google Scholar

Linkedin link

Professional Project Work

• Directshow Source Filter Development

- Repurpose code from existing MIT licensed project to create a source filter
- Analyzed requirement of our project and capabilities of directshow source filter to report what is feasible and accordingly influenced application architecture
- Implemented simple IPC mechanism to facilitate communication between COM component and application

• Device Control Based on Computer Vision

- Implemented object detection system in C++ using OpenVINO sdk for Windows10 based application
- Implemented relay control over tcp in $\mathbf{C}++$ using windows networking library and knowledge from the relay documentation
- Developed custom algorithms to do particular object detection based on application use case and showed their effectiveness using client provided dataset

• Smartphone User Detection

- Collected Data and trained machine learning model inspired from a given paper in Python3.6 using numpy, scikit-learn package
- Implemented simple communication over http protocol locally to connect front end code and backend ml inference using **flask**, **json** packege

• Content Based http/https Traffic Filtering

- Implemented local cache in C++ using sqlite library in Windows client PC(Windows10)) application
- Written simple **javascript** for browser based control panel of client PC application

Academic Project Work

- Sign Language Translator:
 - Implemented gravity corrected gyroscope and accelerometer value reading system from MPU6050 breakout board using https://github.com/jrowberg/i2cdevlib/tree/master/Arduino/MPU6050 library to interface with Arduino
 - Created a representation of the needed movement to indicate 17 signs
- Obstacle Detection and Surface plotter:
 - Written code for a depth measurement system using HC-SR04 sonar sensor controlled by ATmega32 microcontroller
 - Implemented a plotting mechanism on 12864ZW LCD screen to depict the 2d surface topology
- A Cineplex Management Web Application
 - Written backend code in **php5** on Laravel4
 - Database implementation for **Mysql** DBMS

Other tools I am familiar with...

• Programming language: Java, javascript

•Framework: Codeigniter, Laravel5

•H/W Development Platform: Raspberry PI,

•Build system and Deployment tools: Make, Docker

Education

•B.Sc. in Computer Science and Engineering Dept. of Computer Science and Engineering, Bangladesh University of Engineering and Technology (BUET).

Graduation Year - 2017, CGPA - 3.57

Work Experience

- Software Engineer
 - BJIT Ltd., from July,2018 October,2020
- Senior Software Engineer
 - BJIT Ltd., from November, 2020 Present

Accomplishments

- Bangladesh-Japan Engineers Training Program(BJET) 2nd batch (March, 2018-May, 2018)
- ITEE FE exam March 2018 Top Scorer among ITPEC countries (Examinee no FE01-0081)
- Achieved 331 out of 340(reasoning part) and 3 out of 6(analytical part) in GRE on Nov 25, 2019