

Puranjoy Saha

Computer Engineering

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Skills

- **Languages:** Java, C#, JavaScript, C, C++, SQL, HTML, CSS, XML, Python, Git
- **Libraries and Frameworks:** .Net core, Azure, Xamarin, ASP.NET, TensorFlow, Dapper, MongoDB, React, ARKit

Work Experience


Multimedia/Software Developer

 Jan 2020 – Apr 2020

Blackberry Limited

- Developed a log analysis tool which will be used to process and debug company and customer log files.
- **Rapidly prototyped** various **machine learning algorithms** able to detect anomalies in a log file with an **95%** accuracy.
- Incorporated **multiprocessing** and **multithreading** into the log analysis tool making it run 5x faster.
- Designed a **NoSQL database** in **MongoDB** that is able to handle custom footprints and provide queried data **40% faster**.
- Developed a **data visualization dashboard** showing machine learning models and hyperparameters for large data using python with a user-interface architecture and navigation system that increased user **satisfaction rating by 50%**.

Full Stack Web and Mobile Developer

 May 2019 – Aug 2019

Calgary Board of Education

- Designed and developed an admin portal web application using ASP.Net and SQL server 2019.
- Developed **cross platform Employee Directory application** supporting both (Android and iOS) using Xamarin.
- Implemented **authentication** and **authorization** services using OAuth 2.0 increasing the security of both applications by **95%**.
- Implemented a **backend data API** using Azure to get real time data updates, increasing mobile app performance by **40%**.

Software Developer

 Sep 2018 – Present

Waterloo Alternative Fuels (Connected Software sub team)

- Designed and developed a mobile application that is capable of **ridesharing** and allows for interfacing with the vehicle to give **real time updates** about the car using **React Native**.
- Developing a **driver drowsiness detection** application to increase the security of the overall car using **Python and OpenCV**.

Projects

Joy Cart – Ecommerce website (React, Django)

 Apr 2020

- Designed a responsive ecommerce website with an easy to navigate UI with React.
- Implemented a payment system with stripe that allows users to buy products and keep track of their payments.
- Used the Django framework to integrate authentication and drive the backend for this project.


Aware – App to help people with visual impairment (Swift 4)

 Feb 2020

- Developed an iOS app that uses machine learning to identify surrounding environment and objects.
- Integrated audio output and communication system allowing vocal interaction using apple's speech API.

Education

Candidate for BAsC Computer Engineering, University of Waterloo

 Sep 2018 – Apr 2023