

# Santanu Sarker

4A Computer Engineering

✉ sarkersantanu@gmail.com | ☎ (647) 701-8107

🏠 santanusarker.com | 🌐 santanu23 | in santanu23

## 👛 EXPERIENCE

### TOP HAT | SOFTWARE DEVELOPER

Jan 2018 – Present | Toronto, ON

- Building a JWT based authentication service using AWS aiding in the transition from a monolithic architecture to microservices

### IBM | SOFTWARE DEVELOPER

May 2017 – Aug 2017 | Toronto, ON

- Implemented a proof of concept utilizing a deep neural network (Faster-RCNN) and OpenCV to detect shoes in images of celebrities
- Utilized IBM Watson Visual Recognition to create an image classifier for classifying shoes into several categories (boots, heels, sandals, sneakers)
- Improved a Python microservice for detecting signatures in tax forms using Tesseract OCR Engine increasing F score by 25%

### SAP | SOFTWARE DEVELOPER

Sep 2016 – Dec 2016 | Toronto, ON

- Developed a component for graphing real-time sensor data included in SAP Dynamic Edge Processing using D3.js, and Jetty Web Sockets
- Performed code reviews, identified improvements and assisted team in writing clean efficient code with high standards and quality

### FLEET COMPLETE | SOFTWARE DEVELOPER

Jan 2016 – Apr 2016 | Toronto, ON

- Created a responsive web application using Angular Js in accordance to Material Design guidelines used by sales team boosting productivity
- Implemented RESTful API services in C# interfacing with MS SQL database
- Extended functionality of Microsoft Dynamics CRM by creating C# plugins

### MATCOR-MATSU | SYSTEMS/NETWORK ADMINISTRATOR

May 2015 – Aug 2015 | Toronto, ON

- Developed a C# windows application to monitor performance metrics of machines on the local network resulting in a 30% increase in availability
- Assisted in the design and implementation of system/network modification

## 📖 EDUCATION

### UNIVERSITY OF WATERLOO | COMPUTER ENGINEERING

2014 - 2019 (Expected) | Waterloo, ON

Relevant Courses

Computer Networks • Database Systems • Compilers • Operating Systems  
Algorithms & Data Structures • Digital Computers • Digital Hardware Systems

## ⚙️ PROGRAMMING

### LANGUAGES

Java • C# • C++ • C  
HTML • CSS • JavaScript  
Matlab • Python • SQL

### TECHNOLOGIES

AngularJS • Node.js  
SAP UI5 • Materialize  
MySQL • MongoDB  
Jetty • ASP.NET MVC  
OpenCV • Tesseract OCR  
IBM Bluemix • Amazon AWS

### TOOLS

Git • TFS • VS Code

## 🏆 PROJECTS

### 🌐 INFO SESSIONS

A web application that displays daily employer information sessions on UW campus

### 🌐 MOODIFY

A web application that suggests a Spotify playlist based on a user's mood using facial recognition (Microsoft Emotions API)

### 🌐 SMART GARDEN

IoT project built using Raspberry Pi that automates watering and lighting to ensure optimal growth conditions for plants

### 🌐 KITCHEN IOT

Hackathon project that uses an Arduino to control appliances creating a smart kitchen

## 💡 INTERESTS

Cryptocurrencies (blockchain)  
Photography • Gaming • Fitness