

Skills

Languages: C#, Python, C++, JavaScript, Ruby, Java, SQL

**Tools/Frameworks:** React, ASP.NET, Django, Git, NodeJS, MySQL, MongoDB, AWS

Certifications: NYU: Operating System and Computer Hardware, UAlberta: Software Design & Architecture, IBM AI En-

gineering, Toastmasters International

# **Professional Experience**

### Miovision - Full Stack Software Developer

C#, JavaScript, jQuery, AWS, NodeJS, ASP.NET

Sept. 2020 - Dec. 2020 Waterloo, Ontario

- Designed and implemented a customer support tool using C# and ASP.NET, performing mySQL operations and improving support resolve times by 40%
- Developed an analytics library using jQuery and Segment API, analyzing user behavior for product improvements by capturing 20+ unique events across 500+ daily users
- Created a microservice using React and NodeJS to upload and store study videos into AWS S3, increasing upload file size from 5GB to 5TB and improving upload performance

#### **Miovision** - Software Developer

Jan. 2020 - Apr. 2020

C#, AWS, ASP.NET, SQL, Terraform, NUnit

Waterloo, Ontario

- Eliminated legacy application's security vulnerabilities by implementing **AWS IAM** roles and **AWS Parameter**, automating role assignments and EC2 instantiation using **Terraform**
- Developed a new event-driven monitoring service to track user activity using AWS Lambda (NodeJS) and EventBridge, sending metrics to Datadog
- · Created automated unit tests with NUnit framework, increasing test coverage by 50% and ensuring functionality is preserved

#### **Lumentum** - Software Developer

May 2019 - Aug. 2019

Python, VB.NET, OpenCV, SQL

Ottawa, Ontario

- Developed a computer vision script (OpenCV) using Python to analyze tube sealing quality, eliminating manual validation of 500+
  images per day
- Built an automation application in VB.NET to aid in the manufacturing of optical devices, reducing cycle times by 15 minutes
- Created a database migration shell script to ensure data consistency between QA and staging environments, removing the need to manually run stored procedures

### KingTiger Technology Inc. - Junior Engineering

C++, Python, OpenCV, VBA

Aug. 2018 - Dec. 2018 Toronto, Ontario

- Automated R.A.M inspection process by detecting module's orientation using OpenCV (C++), saving 10+ minutes of manual sorting
- Programmed a barcode scanner application using Python, Z-Bar, and dlib, allowing users to upload over 150 company assets

## Projects

### Rate My Idea - Serverless Application

- Engineered a serverless application using **React**, **AWS Lambda**, and **Amazon API Gateway** for users to post, comment, and rate project ideas
- Utilized Google Trends API to obtain search traffic data related to project ideas and created user friendly graphs using the API data

## **Let's Talk!** - Full Stack Web Application

- Developed a web application for communication between users utilizing token authentication, RESTful calls, and ORM (mySQL)
- Implemented MVC software design pattern; front-end generated using React, developed REST API using Django back-end

### FishAI - Machine Learning Mobile (iOS) Application

- · An iOS application developed in Swift used to classify fish species based on a photo taken by the user
- Created and trained deep learning neural network (CNN) using Keras, deployed model to CoreML, and created a script to build image dataset leveraging Bing API

## Education

**University Of Waterloo** 

Waterloo, Ontario

Candidate of B.ASc: Honours Mechanical Engineering - Artificial Intelligence Option

GPA: 3.9/4.0

Dean's Honours List: Fall 2017 & Winter 2019 - Top 10% of class

Graduating Dec. 2021