

Ravindu Angammana

Software Engineering

University of Waterloo



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EDUCATION

University of Waterloo Software Engineering – Major GPA: 3.93

Sept 2017 – April 2022

EXPERIENCE

EPOCH

July 2018 - Present

Backend Developer

- Created a notification service that notifies users of upcoming events using the **Celery scheduler** and **RabbitMQ** as the message broker
- Implemented new models for user-curated events using **Python** and **PostgreSQL**

Bank of America Merrill Lynch

May 2018 – August 2018

Software Developer

- Developed an algorithm to **evenly distribute 750 GB in data** over 8 new engine hosts using **Python** scripts to **autogenerate SQL queries**
- Refined test failure reporting for QA by creating a web dashboard using **Flask** to extract and display test results from a key-value pair **NoSQL database**
- Improved asset querying from **linear time to constant time** by rewriting objects in a hash-table inspired data format

WATonomous Student Design Team

Prediction Sector Core Member

Jan 2018 – April 2018

- Goal is to turn a Chevy Bolt **fully autonomous** to win the Society of Automotive Engineer's AutoDrive Challenge
- Implemented a self-made **prediction model in C++** to track the future locations of detected objects to an **accuracy of above 75%**

PROJECTS

RPS Robot

github.com/rbangamm/RPS_Robot

- Created a program that plays rock-paper-scissors in real time and **wins 99% of the time**
- Built a **feed-forward neural network from scratch in Python** to train the program to recognize each individual move
- Optimized runtime using **OpenCV** to process the image and feed it into the neural network

StackSearch

github.com/rbangamm/StackSearch

- Developed an **Alexa skill using Node.js** to help developers find answers to technical questions without having to manually type queries into a search engine
- Clarified Alexa's response to a user's question by parsing answer text from Stack Overflow using the **StackExchange API and regular expressions**
- Integrated feature to send code snippets in answers via SMS using the **Twilio API in Python**

ACTIVITIES & INTERESTS

Second degree taekwondo black belt, Bass vocalist for Waterloo Waterboys, Amateur hiker