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# OLIVIA KIM

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## LANGUAGES

Python • C++ • JavaScript • SQL • HTML • CSS

## TECHNOLOGIES

Git • Linux • PostgreSQL • MATLAB • scikit-learn • TensorFlow • NLTK • Redis • AWS • JQuery • React • Django

## PROJECTS

### SCREEN RECORDER

A command-line tool for Linux written in Python that allows both audio and video streams from a user's screen to be captured, combined, and saved in video format. The area of the screen that will be recorded may be selected via a simple UI enabling the user to drag and select the region of interest.

### PIXEL PERFECT PIECE OF PIZZA BOT (PPPPB)

The Pixel Perfect Piece of Pizza bot is a web-based chat bot that provides a quick and easy way to order pizza. One can engage in a conversation with the PPPPB, and will be asked a series of questions regarding their order, rather than filling out long on-line forms or ordering pizza via phone.

### THE CATASORT

The Catasort is a robotic candy sorting machine that catapults different colored candy into their respective bins based on color. This project was created using various Lego Mindstorms sensors and was written in Robot C.

## LINKS

**GITHUB** - [github.com/oliviakim95](https://github.com/oliviakim95)

**PERSONAL WEBSITE** - [oliviakim95.github.io](https://oliviakim95.github.io)

**LINKEDIN** - [linkedin.com/in/oliviakim95](https://linkedin.com/in/oliviakim95)

## EDUCATION

### 3B MECHATRONICS ENGINEERING

University of Waterloo

Expected Graduation - April 2018

## ACHIEVEMENTS

**FIRST PLACE HACK** - Awarded to the "Pixel Perfect Pizza Bot" at the Kik Hackathon hosted at the University of Waterloo (Feb. 2015)

### GEOGRAPHERS WITHOUT BORDERS SPONSOR

**AWARD** - Awarded to "In the Loop" mobile application at Delta Hacks hosted at Macmaster University (Feb. 2015)

## EXPERIENCE

### SIGOPT INC. • SOFTWARE ENGINEER

San Francisco, Ca, Sept. – Dec. 2016

- Designed and implemented a neural network to solve a reinforcement learning problem and authored a corresponding blogpost
- Created first draft evaluation algorithm for ranking multi-objective optimization solutions
- Modified core API Objects as well as corresponding infrastructure and web design to allow for multi-objective optimization solutions
- Optimized database-API interaction with efficient queries and connection methods
- Automated test environment setup and teardown workflow

### ARB LABS • SOFTWARE ENGINEER

Toronto, ON, Jan – May. 2016

- Designed and implemented a data assembly and serial device synchronization system
- Developed a C++ module to capture images from different angles and transform them to attain images with the same camera perspective
- Created a library for interfacing between Python and C++ modules of the codebase
- Implemented a chat bot running on an HTTP server to relay GitHub notifications to team members

### WRIBER INC. • SOFTWARE/FULL STACK ENGINEER

Kitchener, ON, May – Sept. 2015

- Performed data and regression analysis to form a learned ranking model
- Improved named entity recognition and part of speech tagging techniques
- Created dynamic analytics dashboard to display user statistics in visually appealing forms
- Implemented dynamic, team-based interfaces to view document lists with real time changes

### LOCKHEED MARTIN CANADA • SOFTWARE DEVELOPER

Halifax, NS, Sept. – Dec. 2014

- Implemented 3d logic to animate software representations of mechanical parts
- Designed and integrated classes and factories to simplify and eliminate duplicate code
- Studied and examined the functionality of the mechanism being simulated to fully understand and accurately implement its software representation
- Fixed and created unit tests