

Chandler Lei

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PROFILE

I am an aspiring software engineer with comprehensive experience shipping products from design to deployment

EDUCATION

University of Waterloo

3rd Year Computer Engineering

Sep 2017 – present

- Candidate for BAsC, **cGPA of 3.88 (90.30%)**
- Relevant Coursework: Systems Programming + Concurrency, Instrumentation + Prototyping, Embedded Systems, Data Structures + Algorithms

SKILLS

Languages

Python, JavaScript, C/C++, Ruby, Java, GraphQL, SQL, HTML, CSS

Frameworks/Libraries

Django, Graphene, Ruby on Rails, React, React Native, Redux, Bootstrap, TensorFlow, Numpy

Other

Linux, Git, SVN, PostgreSQL, MySQL, Salesforce, Heroku, Netlify, Algolia

AWARDS

Big Data Challenge Data Science Award

Feb 2017

BDC Hackathon Winner

Mar 2019

4 Times UW Term Dean's Honours List

1A, 1B, 2A, 2B

WORK EXPERIENCE

Secret Mission Software

Software Developer: React, Gatsby, React Native, Redux, Django, Graphene, Apollo

Sep 2019 – Dec 2019 | Toronto, ON

- Introduced and **migrated** REST API **Backend** to a Graphene (**GraphQL**) layer, **reducing** total backend API **request load by 50%**
- Enhanced functionality of CSV/XML data parser, adding new features and **reducing bug reports by 90%**
- Created a robust **Gatsby** theme/static-site generator, replacing clients' user-facing product sites and **reducing load times by 95%**
- Devised an **API ENV switcher** for React Native App, **boosting dev efficiency**

Lending Loop

Software Developer: Ruby on Rails, Salesforce, Heroku

Jan 2019 – Apr 2019 | Toronto, ON

- Increased user signup completion rate **150%** by solely implementing a new signup flow (**models, controllers, forms/views**)
- **Decreased** database **query times by 50%** for specific queries through **refactoring** of model relationships and **query logic**
- Created a **REST API** endpoint that automated user emailing using SendGrid

Bank of Montreal

Infrastructure Engineer: Bash, DataPower, Ansible, Bamboo

May 2018 – Aug 2018 | Toronto, ON

- Elevated the functionality of the **IBM DataPower** system by creating **Bash scripts** for certificate uploading

PROJECTS

SnakeAi (Python+Pygame App)

Dec 2019 | Pygame, Tensorflow, Keras, Numpy, Machine Learning

- Applied the **NEAT** genetic algorithm to the classic snake game and optimized a **neural network** AI for unsupervised learning

Spotify-Tracks (Web App)

Sept 2019 | React, Spotify Web API, Chart.js, Bootstrap, Netlify

- Implemented statistics and **data visualizations** of a user's Spotify history
- Designed a **responsive UI** with data propagation through **props** and **Context API**

UWSublet (Web App)

Jun 2019 | Ruby on Rails, Google Maps API, Bootstrap, Heroku

- Integrated **Google Places API** to display maps and calculate listing distances
- Delivered an in-app communication system powered by comments/notifications

Bike Safe (Embedded System)

Jul 2019 | C, TI MSP430, DriverLib, DipTrace, Soldering

- Initialized communication between hardware (ultrasonic distance sensor, LEDs, LCD display) and **microcontroller** through **DriverLib**