

SIMON ZENG

Software Developer

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🐙 github.com/s-zeng

EXPERIENCE

Performance Engineering/Test Automation Co-op

CENX

📅 July 2017 – September 2017

📍 Ottawa, Ontario

- Automated stress testing on company products and networks using **Python**
- Developed custom TCP-interfacing implementations of IETF RFCs in **Bash** and **Python** to properly debug non standards-compliant network stacks
- Caught and reported multiple bugs and issues in **Clojure** code, leading to large performance increases and major security fixes

Full Stack Web Development Intern

inBay Technologies

📅 July 2016 – August 2016

📍 Kanata, Ontario

- Fetched and formatted statistics and metrics from network endpoints using **Ruby (on Rails)** and **Sinatra**
- Constructed front-end web pages using **HTML**, **CSS**, and **Coffeescript** to present statistics to clients

PROJECTS

Polynomial Interpolator

github.com/s-zeng/interpoly

- Developed a small **Haskell** based CLI utility that generates a minimum degree polynomial to interpolate over any finite list of numbers

Neural Network Based Automatic Midi Music Generator

github.com/s-zeng/rag-shenanigann

- Scraped and preprocessed web MIDI files into neural network consumable text format with a suite of **Python** scripts
- Automated training deployment of **Lua** based recurrent neural networks with **Docker**

Discord API Music Player Bot

github.com/s-zeng/Zengyatta

- Interfaced with the Discord REST API using **Java** to create a bot that plays music in voice channels
- Reverse engineered Bandcamp's web services to enable the use of Bandcamp links as a music source

SUMMARY

- Professional experience in **Python**, **Clojure**, and web development
- Robust background in functional programming (i.e. **Scheme**, **Haskell**, **Clojure**)
- Strong interest in security, networks, and low level engineering
- Avid advocate for Linux, Vim, and other open source software

SKILLS

Languages

Python Java Clojure Clojurescript
Scheme Haskell Bash Script C
Ruby Javascript Coffeescript
HTML CSS SASS

Tools and Technologies

Linux (Arch) Vim Latex Git TCP
Ruby on Rails Sinatra Docker

AWARDS & CERTIFICATIONS



ECOO Finalist

Lead my high school's computer science team to a 15th place provincial finish



Qualified Life Saving Instructor and Water Safety Instructor

Certified by the Red Cross and the Lifesaving Society. Includes CPR-C and Standard First Aid

EDUCATION

Honours Computer Science, Co-op

University of Waterloo

📅 September 2018 – May 2023 (expected)

GPA: 3.8/4