SIMON ZENG

Software Developer

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EXPERIENCE

Performance Engineering Co-op

Ericsson

📅 May 2019 – August 2019   📍 Kanata, Ontario

- Implemented a robust, pure, and functional metrics system using **Clojure** and **Python**
- Developed a Domain Specific Language interpreter using **Lisp** for specialized tooling

Test Automation Intern

CENX

📅 July 2017 – September 2017   📍 Ottawa, Ontario

- Automated load testing on company infrastructure using **Python**
- Implemented IETF RFC socket protocols in **Bash** and **Python** to debug non standards-compliant network stacks
- Found and reported multiple performance bottlenecks and moderate-severe security issues

Full Stack Web Development Intern

inBay Technologies

📅 July 2016 – August 2016   📍 Kanata, Ontario

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

PROJECTS

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 process of MIDI manipulation and neural network training using **Docker**

Polynomial Interpolator

github.com/s-zeng/interpoly

- Developed a small **Haskell** based CLI utility that generates minimum degree polynomials to interpolate over finite lists of numbers
- Available on the Arch Linux User Repositories as aur/interpoly

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

SKILLS

Languages

Python   Java   Clojure   Lisp   Haskell   Bash Script   C   Ruby   Javascript   Coffeescript   HTML   CSS

Tools and Technologies

Linux   Vim   Emacs   Latex   Ruby on Rails   Sinatra   Docker

OPEN SOURCE CONTRIBUTIONS

[4910aa7] Add scheme support

ujihisa/repl.vim

Vim plugin that integrates REPL functionality

[965f055] Implement exclusion list for use with rclone check

Spazzlo/folderclone

Python script that is able to quickly clone large shared folders (up to 900TB) on Google Drive

EDUCATION

Honours Computer Science, Co-op

University of Waterloo

📅 September 2018 – May 2023 (expected)

Major Average: 91%