SIMON ZENG

Software Developer

@ contact@simonzeng.com

4 613-983-9079

% simonzeng.com

in linkedin.com/in/s-zeng1

github.com/s-zeng

EXPERIENCE

Performance Engineering Co-op

Fricsson

May 2019 - August 2019

♥ Kanata, Ontario

- Developed a pure functional Clojure metrics library to monitor complex JVM architectures
- Implemented a parser and interpreter in **Python** for an internally designed domain specific language

Test Automation Intern

Ottawa, Ontario

- Developed robust automated UI-testing Python framework for load-testing web applications
- Created custom implementation of IETF RFC socket protocols to debug non-standard network stacks
- Discovered multiple security issues, including cryptography weaknesses, via automated fuzzing

Full Stack Web Development Intern

inBay Technologies

🛗 July 2016 - August 2016

♥ Kanata, Ontario

 Created internal use development tools backed by Ruby on Rails and Coffeescript to monitor and debug specialized production systems

PROJECTS

Board To Latex

github.com/s-zeng/board-to-latex

• React webapp that transcribes photos of chalkboards and whiteboards to latex, with OCR handled by a **Flask** backend

Machine Learning Ragtime Generator github.com/s-zeng/rag-shenanigann

 A suite of Python scripts that scrape ragtime MIDI files from the web, and preprocesses them into a custom machine-readable format designed for easy neural network training, then converts model output back to midi

Tiny Polynomial Interpolator

github.com/s-zeng/interpoly

- Extremely small polynomial interpolating CLI tool written in 15 lines (447 bytes) of **Haskell**
- Uses a custom technique with better precision than Lagrange interpolation

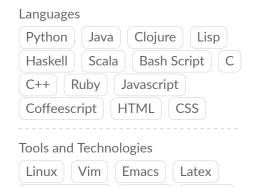
SUMMARY

- Professional experience in Python,
 Clojure, and web development
- Robust background in functional programming (i.e. Scheme, Haskell, Clojure, Scala)

MISC. EXPERIENCE

- MATH 135/136 (Algebra and Linear Algebra) Teaching Assistant [2019]
- PMATH 340 (Elementary Number Theory) Private Tutor [2019]
- Swim instructor [2018]
- STEM Camp Counsellor [2017]
- A/V Co-ordinator [2015]

SKILLS



Sinatra

Docker

EDUCATION

Ruby on Rails

Honours Computer Science, Co-op

University of Waterloo

September 2018 - May 2023 (expected)

2A term | Major Average: 88.5%