4A Computer Science github.com/FYJen fjen@uwaterloo.ca (226) 972-0522

# **SUMMARY OF QUALIFICATIONS**

- Python (Flask, SQLAlchemy, GoogleData Client, Mock), Ruby on Rails (Redmine):
  - Feature implementations, APIs, performance optimizations and bug fixes
  - o A personal website powered by Flask and hosted on AWS
- C++/C:
  - An OS with file system, memory management, threads and scheduling
  - o A program with concurrency and synchronization using Administrator model
- Also worked with: Bash, Docker, HTML, CSS, Bootstrap, JavaScript, Perl
- Database: Redis, SQLite, MySQL, PostgreSQL
- Server: Apache, Nginx, DNS, HAproxy, Jenkins CI Server, Azkaban Server
- Cloud: AWS (EC2, S3, Route 53, EMR), GCE, RackSpace, CloudStack, OpenStack
- Tools: Git, Sublime Text 2, Vim, Linux (Ubuntu), Windows, Macintosh

### **WORK EXPERIENCE**

- Cloud Engineering Intern at Inkling, San Francisco, CA, USA, 05/2014 08/2014
  - Implemented features for backend services of Inkling Habitat with Python and Ruby
  - o Refactored and redesigned new workflows for publishing books to Inkling
  - Participated in fixing bugs and optimizing HTTP slow requests in the code base
- Web Ops Engineering Intern at Inkling, San Francisco, CA, USA, 09/2013 12/2013
  - Developed and fixed internal workflows and tools with Python and JavaScript
  - Participated in daily production deployments and maintenance of Cloud environments
  - o Implemented a job scheduler with open-source Azkaban Server and AWS EMR
- Cloud Computing Software Developer at OICR, Toronto, ON, Canada, 01/2013 04/2013
  - o Improved software Installation time by 50% to 80% with Bash
  - o Built applications to deploy scalable SGE Cluster with NFS on GCE with Perl
  - Created generic application to launch scalable environments on AWS
- Cloud Operation Analyst at <u>Awareness Inc.</u>, Burlington, ON, Canada, 05/2012 08/12
  - Implemented a private Cloud with CloudStack and LDAP to provide laaS locally
  - Deployed scalable Cloud environment with Alarm Cloak, SQS, S3 and Load-Balance on AWS
  - o Performed benchmarking on database and disk I/O on Amazon and RackSpace
- Project Engineering Assistant at NCHC, Hsinchu Science Park, Taiwan, 09/2011 12/2011
  - Configured DNS with geo-location feature to distribute client connections
  - Implemented load-balancer using HAproxy, Dstat and third-party libraries
  - o Co-Developed Cloud storage service nation-wide

# **PROJECTS**

#### Personal Website

- A personal website containing information about myself. Many proofs of concept are done in this playground
- Hosted on AWS and built with Python, Flask framework, SQLAlchemy, Jinja2 Template, Docker, Redis, SQLite, Bootstrap, HTML, CSS and Nginx

## YouTube Playlist Curl

- An application that will curl a YouTube playlist and download individual songs by posting requests to youtube-mp3.org
- o Built with Python and Google YouTube Data API (V3)

# • Eat all Candies (Cut the Rope version)

- An interactive game to collect candies and dodge obstacles dropping from the sky by using arrow keyboards
- o Built with Python and Pygame engine

## **EDUCATION**

• Candidate for Bachelor of Computer Science
Honours Computer Science, University of Waterloo, ON, Canada, September 2010 - present