Steve Weng

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3B Comp Sci/Software Eng Option ● ID: 20474930

Work Experience

Ericsson Canada Inc.   **(Remote) Plano, Tx (Summer 2015)**
Software Developer Co-op - Intelligent RAN Project Manager & Developer
  - Designed and implemented an algorithm that decreased coverage loss during Radio Access Network (RAN) software upgrades by ~32% while maintaining previously maximized efficiency.
  - Worked with and led team to develop a parser to extract information from raw data along with a tool to measure efficiency and coverage loss to compare algorithms.
  - Collaborated with marketing team to achieve further funding and continuation of project (for Fall 2015).

Ericsson Canada Inc.   **Ottawa, ON (Winter, Summer 2015)**
Software Developer Co-op - PDU Wi-fi, AP6335 Strandmount Project
  - Developed in C, implemented a configuration settings developer tool for basic wifi drivers, easing development of Ericsson's newest core access point product AP6335.
  - Restructured bloated and rigid automation framework into a clean, shared environment to allow engineers to test their code at their own leisure, on top of saving ~10h/week for the three-person automation team.
  - Implemented bug fixes for high priority features.
  - Created sanity and regression tests in Python for daily testing of AP6335 and legacy products.

Centre for Extended Learning - uWaterloo   **Waterloo, ON (Fall 2013)**
Digital Media Production - Mathematics Division
  - Added user accessibility feature that read math content/equations out loud to help persons with disability engage in online lectures.
  - Designed content for second year linear algebra course using digital media software and Javascript.

Projects (www.github.com/s4weng)

At War - Fantasy Beat 'Em Up Game   **C++11, SFML (Multimedia Library)**
  - Implemented a scene graph for logical structure, state stack following finite-state machine for state navigation, GUI interface (components, container, buttons, and labels) for menus.
  - Applied post rendering shader (bloom) effect to create illusion of real-world camera shot for graphics.
  - Modified open source animation class to flip sprites (halving amount of textures required), along with features to separate animations that need to be looped and to play at different speeds.
  - Implemented sounds in a 3D space by positioning a listener on a 3D axis with consideration to attenuation and minimum distance.
  - Developed client-server architecture by writing and using custom protocol over TCP/IP to support networking/online multiplayer.

TotalGains - Weightlifting Optimizer Hybrid App   **AngularJS, CanvasJS, Ionic**
  - Designed graphs as a visualization tool to compare ratios between user's lifts and expected lift ratios.
  - Plans out future training sessions for user based on his/her lifts by formulating Prilepin's Chart.

Tools

Languages: C++, C, Python, Bash, HTML/CSS/Javascript, Golang

Other: Unix/Linux, Git, AngularJS, jQuery

Education

University of Waterloo   **Sept 2012 - Dec 2017**
Honours Bachelor of Computer Science (Software Engineering Option)   *Waterloo, ON*
*Enrolled in three courses for a few terms when I had a ~25h/week part-time job (military reserves).