

EDUCATION

UNIVERSITY OF WATERLOO

HONOURS COMPUTER ENGINEERING
Grad. June 2015 | Waterloo ON

CENTENNIAL C.V.I.

Grad. June 2010 | Guelph, ON

CORE SKILLS

PROGRAMMING

Proficient

Java • Python • C/C++

Javascript • R

Familiar

Ruby • CSS • Assembly

SQL • L^AT_EX

UTILITIES

git • OpenCL • OpenMP

OpenCV

OS

*nix • Windows

COURSEWORK

UNDERGRADUATE

Operating Systems

Distributed Systems

Embedded Software

Hardware and Software Codesign

Algorithms

Compilers

Database Systems

Computer Networks

Programming for Performance

LINKS

Github:// [asvoboda](#)

LinkedIn:// [Andrew Svoboda](#)

HOBBIES

Homebrewing Beer

Baking Bread

Hackathons

Coding and Breaking Things

Murder Most Foul; Reading

Drawing and Painting

Analog Photography; Film Development

Canadian History

PERSONAL OBJECTIVES

- Gain additional experience with complex software systems and architecture design
- Reinforce and continue to develop high quality Software and Embedded Engineering skills
- Work on technically challenging and rewarding projects

EXPERIENCE

PALANTIR | SOFTWARE ENGINEER

Sept 2015 - Present | Palo Alto, CA

- Helping product Palantir teams deploy, package and release by writing internal tooling systems in Java.
- Automating the creation of highly available and redundant infrastructure.

PALANTIR | SIMULATION SOFTWARE ENGINEERING INTERN

Sept 2014 - Dec 2014 | Palo Alto, CA

- Primarily focused on creating deployment automation and testing frameworks for product teams
- Implemented and helped to design concurrent testing strategy for automation of installation across multiple disparate product services
- Contributed to implementation of deployment automation for product teams by providing packaging and publishing Gradle tasks

WORKMARKET | SERIOUS SOFTWARE ENGINEERING INTERN

Sept 2013 - Dec 2013 | New York, NY

- Actively maintained the platform, fixing numerous bugs and issues while pushing new features to production daily
- Created infrastructure for push notifications on the back-end system and modified the iOS and Android mobile clients to support push notifications
- Updated internal build and deployment system to be more reliable and robust
- Upgraded internal infrastructure for monitoring application performance and health

PROJECTS

Air Hockey Robot | Capstone Design Project

- Designed, implemented and constructed a fully functioning robot capable of playing air hockey with a human opponent
- Constructed and designed H-Bot mechanical system, and wrote corresponding software control system in C to receive input from main game system to control paddle position
- Contributed to implementation and design of software feedback loop and game algorithms

Custom MPEG Decoder for ECE 423

- Designed, implemented, integrated and tested a simplified video decoder application on a multicore FPGA
- Designed custom instructions for Altera Cyclone DE2 FPGA in VHDL
- Wrote software layer in C to interact with user and play back video at 24 fps with simple play/pause/skip functionality

Performance Systems Labs for ECE 459

- Wrote OpenCL code to parallelise N-body simulations using both brute force and far field approximation techniques on the GPU
- Implemented manual parallelisation with Pthreads and C++11 async I/O
- Utilised compiler optimisations and OpenMP to automatically parallelise large tasks