

## **Work Experience**

**AWS, Amazon AI – Product Manager Technical** March 2018 – Present

- Led the development and launch of AWS DeepComposer, world’s first musical keyboard powered by machine learning to enable developers of all skill levels to learn Generative AI.

**Amazon, Lab126 – Technical Program Manager** March 2017 – February 2018

- Architected software stack from back-end ad exchange, device side logic, metrics, and customer experience spanning multiple teams
- Defined performance/process goals and managed teams to reach those goals

**Amazon, Lab126 – Software Engineer** March 2015 – March 2017

- Joined as the founding engineer on a newly formed device monetization team
- Worked on full spectrum of our startup team, from backend service, device side logic, to frontend renderable; from check in process, build automation, to QA test plan; from customer onboarding, over the air update, to new hire ramp up

**IBM, Hardware Acceleration Laboratory – Research Engineer** July 2014 – February 2015

- Incubate new system architecture and optimize current system for IBM cloud by merging cutting-edge technology with IBM software and hardware products
- Prototype, design, and implement software to replace the current TCP/IP stack of Erlang Distribution with proprietary technology to achieve a 10x improvement for distributed server on the cloud
- Research, design, and setup experiment to benchmark Baremetal vs Virtual Machine vs Container for a number of metrics on the IBM cloud environment to determine optimal workloads

**IBM, Security Systems – Extreme Blue Technical Intern** May 2013 – August 2013

- Collaborated with two technical interns and one MBA intern to build a technical plan and a business case for a product prototype, from conception
- Took full ownership of product by planning the user interface, user interaction, backend logic, and database, and deciding which features to implement for the current sprint using Scrum Methodology
- Developed a new way of identifying vulnerabilities and mitigations for applications: an automatic threat modeling tool for the IBM AppScan security team, with five patents pending
- One of the final two teams (out of fourteen) chosen to present a business pitch to the CEO of IBM, Ginni Rometty, at the annual North American Extreme Blue Expo in Armonk, New York

**A.U.G. Signal Ltd., R&D Department – Software Engineer Coop** Jan. – May 2010, Sep. – Dec. 2011

- Worked on the satellite interferometry project led by the Canadian Space Agency (CSA)
- Implemented abstruse Matlab/C++ algorithms including calculating satellite baselines, removing earth curvatures, and phase unwrapping to get the final interferogram
- Worked on the Bomb-suit project led by the Defense Research and Development Canada (DRDC)
- Developed communication, time management, multitasking, and organizational skills
- Attained a grade of Outstanding (10 out of 10) on the final supervisor evaluation

## **Summary of Qualifications**

- 9 years of product and engineering experience in Artificial Intelligence, consumer electronics, and defense
- Strong product leader and enjoy tackling complex product challenges, identifying the best and simplest product and tech strategies, and leading teams to iterate on them.
- Passionate about software and electrical design and integration shown through DRDC Bomb-suit project, autonomous car project, DARPA UAV competition, and SoC integration at Broadcom
- Excellent ability to acquire new skills and apply them in a professional environment
- Goal oriented self-starter with the ability to work independently and with a team
- Private pilot license for fixed wing aircraft

## **Technical Skills/Projects**

### **Product Management**

- Experienced in delivering products in a fast paced, distributed responsibility, and ambiguous environment
- Deep knowledge of product life cycle, technical program management, and engineering best practices
- Confident leader who can prioritize and analyze tradeoffs, communicate clearly and concisely

### **Software Design**

- Extensive C++/C# and Java experiences developed through co-op experiences and self-directed projects
- Image recognition and computer vision experiences developed from OpenCV programming

### **DARPA UAV Competition**

May – December 2011

- Collaborated with two other team members to build an autonomous quad rotor flying robot that can avoid obstacles using computer vision for a competition held by Defense Advanced Research Project Agency
- Integrated 9 degree of freedom accelerometer with ultrasound rangefinder, and magneto sensor to make our initial measuring unit
- Designed and implemented serial communication and electrical speed controlling algorithm using Arduino
- Wrote object recognition, facial recognition and laser tracking algorithm using OpenCV

### **UBC RoboRacers 2010 Competition**

May – August 2010

- Collaborated with three other team members to build a fast and reliable tape following robot
- Designed and built the robotic sensor circuits such as IR sensors for following tape, an H-bridge for forward and reverse motor control, and power distribution circuits
- Programmed an efficient controlling algorithm which enabled the robot to run at optimal speeds, evade obstacles, and switch lanes
- Improved the robot auto-steering mechanism using PID control

## **Education**

### **University of British Columbia**

Bachelor of Applied Science

Major in Engineering Physics, Electrical Option

### **Dean's Honor Roll**

### **NSERC Undergraduate Student Research Award**

Vancouver, British Columbia, Canada

September 2008 – May 2014

CGPA – **82%**

April 2009 – May 2014

January 2010, December 2011, August 2013