michael.remington1@gmail.com Seattle, WA

# Experience

## Software Engineer

September 2016 - Present

Chiral Software, Los Angeles, CA (Remote via Seattle, WA)

- Created portable real-time machine learning vision software for Lockheed Martin.
- Created machine learning systems for a project that won funding from the US Defense Advanced Research Projects Agency (DARPA).
- Lead author on a patent-pending method for improving real-time neural network processing on portable hardware.
- Created machine learning systems for real-time object detection in live camera streams.
- Built a threaded server that allows remote control of a machine learning system via HTTP requests from a web UI.
- Created a web server that streams real-time video output from a machine learning vision system.
- Built custom tools for data set generation, formatting, and pre-processing.
- Presented a live demo at the ISDEF international defense and security expo in Israel.

# Undergraduate Researcher

September 2015 - July 2016

Hutchinson Machine Learning Research Lab, Western Washington University, Bellingham, WA

- Designed and implemented custom deep and recurrent neural network architectures to model sports data.
- Built a data-processing pipeline that interfaces with a database and normalizes or embeds features appropriately.
- Created custom models with convolutional, LSTM, and deep neural network architectures.
- Wrote code to parse and format datasets into SQL databases.
- Visualized and presented statistical discoveries.
- Created a custom LSTM cell state initialization solution to better model individual teams.

#### Research Lab Assistant

July 2013 - September 2014

Rose Neuroscience Lab, Western Washington University, Bellingham, WA

• Wrote a program in Java to automate a common microscope imaging task. This reduced task time from around forty minutes to near instantaneous.

Intern Summer 2012

Mobius Science Center, Spokane, WA

- Set up a system for recording and interpreting data visually and statistically from visitor surveys.
- Authored an eighty-page booklet detailing the scientific concepts behind each exhibit.
- Created and updated graphic design for public documents.

## Education

Bachelor of Science, Computer Science

Western Washington University, Bellingham, WA, June 2016