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#### Education

Bachelor of Science, Computer Science

Western Washington University, Bellingham, WA, June 2016

#### Experience

#### Undergraduate Researcher

September 2015 - Present

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 pipeline that reads both continuous and categorical features from an SQL database, scales continuous features, embeds categorical features, and feeds batched tensors of all features into a custom model function (e.g. LSTM, deep neural network).
- Parsed and organized large datasets into SQL databases.
- Wrote scripts that interface with SQL databases to analyze data.
- Collaborated closely with a team using a centralized repository.

#### Research Lab Assistant

July 2013 - September 2014

Rose Neuroscience Lab, Western Washington University, Bellingham, WA

• Wrote a program in Java to automate the task of coding microscope images to be evaluated without bias. This reduced image coding time from around forty minutes to near instantaneous.

# **Projects**

### Research Projects:

Deep and Recurrent Neural Networks For Small Granularity Sports Modeling (In progress).

 Designed and implemented deep and recurrent neural network architectures to model sports data at the play-by-play level.

# Independent Projects:

MarketMiner: Financial Prediction with Machine Learning (In progress).

• Financial modeling using neural networks.

Photography Portfolio Website

• Built a photo portfolio website using Bootstrap and Javascript.

## **Course Projects:**

- Wrote a Python program that recursively generates a tree of the state-space for a game of Nim and beats a human player.
- Wrote a banking program in Java using concurrency methods that was able to process 10,000,000 transactions across 100 accounts significantly faster than a sequential program.
- Built a file browser in C, providing a graphical user interface through GTK+3.0.
- Wrote a command line interpreter in C with piped commands, history, and I/O redirection.
- Implemented a server and two distinct types of client for an online chat application using sockets in C.

# Programming Languages

Skilled With: Java, C, Python.

Experienced With: Ada, Visual Basic, Racket, Assembly, HTML, CSS, Javascript.

Tools: Git, Subversion, TensorFlow, Bootstrap. Methodologies: Object-Oriented Programming

## **Publications**

## Conference:

Jacqueline Rose, Nicole Stankowicz, Amanda Leonti, Parker Stafford, Michael Remington, Katrina Mar, Samuel Moss, Andrew Records-Galbraith. *Examination of the Interplay between Acetylcholine and GABA signaling at the NMJ*. CeNeuro 2014.