Michael Remington

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Summary

At my current role I am responsible for the novel deep learning technology that powers our products. I am a lead author on four published patents that relate to deep learning for visual anomaly detection. I have also designed and implemented custom machine learning solutions for clients that have included DARPA and Lockheed Martin. My experience also includes applying machine learning to financial, sports, genetic, and infectious disease data. I take machine learning systems from design to implementation to live deployment.

Experience

Machine Learning Engineer
September 2016 - Present

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

- Lead author on a four published deep learning patents relating to computer vision and anomaly detection.
- Created end-to-end deep learning pipelines that include data processing, training, live deployment, and backend sever components.
- Designed, developed, and implemented real-time video anomaly detection systems.
- Created machine learning software for a project that won funding from the US Defense Advanced Research Projects Agency (DARPA).
- Presented a live demo at the ISDEF international conference overseas. This resulted in acquiring one of our main clients.

Technologies:

- Convolutional networks, convolutional autoencoders, unsupervised clustering, anomaly detection, Tensorflow, Keras, Pandas, Mongo, SQL, Docker, Darknet, Python, ZMQ, Matplotlib.

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.
- Created a custom LSTM cell state initialization solution to better model individual teams.
- 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.

Technologies:

- Tensorflow, recurrent neural networks, LSTM networks, SQL, Python, Matplotlib.

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.

Education

Bachelor of Science, Computer Science
Western Washington University, Bellingham, WA, June 2016

Distinctions

Outstanding Poster of the Undergraduate Scholars Showcase Poster Competition
Jake Moorhead, Josh Osborne, Michael Remington, Sam Kaplan and Brian Hutchinson. *Play-By-Play Sports Modeling with Deep and Recurrent Neural Networks.* 2016