Shawn Anderson

Yogi, Hacker, Data Shaman

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Technical Skills

Big Data Toolbox

SQL	Python	Numpy	Pandas
Scipy	SKLearn	Keras	Spark
Jupyter	MatplotLib	D3	Powerpoint

Programming

Python	Javascript	C++	Scala
Linux	Command Line	Vim	Git

Artificial Intelligence

Deep Learning	Reinforcement Learning
Evolution Strategies	Tensor Decomposition
Probabilistic Graphical Models	Distributed Computing

Project Experience

Predicting Limb Movement Intention From EEG Signals
Univesity of Alberta *Jan. 2016 – Apr. 2016*

- Given EEG data recorded on subjects in both rest and movement, my team used hidden markov models to predict movement intention

Instrument Recognition in African Music Recordings
University of Alberta *Sept. 2015 – Dec. 2015*

- Decomposed African songs into feature vectors via the open source signal processing tool Marsyas
- Experimented with various Maching Learning techniques including SVM, KNN, and Logistic Regression to classify which instruments are present in a song

Professional Development

Deep Learning Using Tensorflow Dec. 2016
Google (via udacity.com)
Bitcoin and Cryptocurrency Technologies Aug. 2016
Princeton University (via Coursera.com)
Probabilistic Graphical Models Apr. 2016
Stanford University (via Coursera.com)
Maching Learning Dec. 2015
Stanford University (via Coursera.com)

Education

MSc. Computing Science, Big Data Sept. 2017 – Present
Simon Fraser University, Burnaby Canada

- Teaching Assistant
  Implications of a Computerized Society
  Sept. 2017 – Present
- Machine Learning, Data Mining, Big Data
  Sept. 2017 – Present

BSc. Computing Science Sept. 2011 – Apr. 2016
University of Alberta, Edmonton Canada

- VP Social Executive Member

Technical Experience

Data Scientist May. 2018 – August 2018
Royal Bank of Canada , Toronto ON

- Resolving unmanigable access control by clustering permissions into business roles
- Using unsupervised learning techniques such as matrix factorization, clustering, and graph visualization
- Using Python, Pandas, Excel, Jupyter, D3, Javascript, and various open source libraries
- Working with business users, and team mates to develop an application solution
- Regular presentations and demonstrations to bank executives
- Presenting final product at the RBC Amp Expo

Software Engineer Sept. 2017 – January 2018
Fire Out , Burnaby BC

- Implementing and training a computer vision model to detect the presence of fire in a video stream
- Using transfer learning with YOLO: Real Time Object Detection, built on the Darknet deep learning library
- Using Python to facilitate object localization between camera, rasberry pi, arduino

Contract Developer Aug. 2016 – Sept. 2017
Four Winds and Associates , Edmonton AB

- Full stack development of Community Demographics web database
- Back-end development with Python and django web-framework
- Front-end development with Javascript and Angular framework

Junior Developer May – Aug. 2015
Government of the Northwest Territories
Dpt. Justice - Informatics , Yellowknife NT

- Developed a web API using Scala with Play Framework to serve as the backend for online fines payment

Business Support Analyst May – Aug. 2014
Government of the Northwest Territories
Dpt. Health and Social Services, Yellowknife NT

- Developed a front-end system to display medical travel data using PHP, HTML, JavaScript and SQL

Helpdesk Analyst Sept. 2013 – May 2014
University of Alberta
Dpt. Computing Science , Edmonton AB

- Extensive experience with Linux systems and networks