Mitchell Burk

EXPERIENCE

Purdue University Northwest

MAR. 2020 - CURRENT

Student Machine Learning Researcher

- Using word2vec on the COVID-19 Open Research Dataset (Python, Tensorflow, word2vec, Ubuntu, NLTK)
- Research in visualizing multi-dimensional word embeddings(Tensorflow, vec2graph, Reinforcement Learning, DNN/CNN)

Purdue University Northwest

SEPT 2018 - NOV 2019

Security Specialist

- Responded to incidents involving spam/phishing emails, compromised accounts, suspicious network activity.
- Wrote code to parse unorganized reports (Python, Pandas, Anaconda)
- Record keeping of weekly firewall reports and malware scans (Checkpoint, Malwarebytes, McAfee)
- Assisted in the creation of weekly "Security Tips" sent out to all faculty, staff, and students

All Information Services Inc. (AIS)

MAY 2017 - AUG 2017

Junior Network Analyst

- Installed networking equipment for a public school district (Access Points, Switches, Racks)
- Organized data closets

PROJECTS

Predicting The Migration Path Of Birds Using Deep Learning

JAN 2020 - MAY 2020

- Goal was to use predit the path of White Storks given geospatial and temperature data
- Developed various models (K-Means clustering with a Logistic Regression, Neural Network, and a Deep Neural Network, Hidden Markov Model, and Recurrent Neural Network) to create predictions (Pandas, Numpy, K-Means, Tensorflow, Logistic Regression, NN, DNN, HMM, RNN)

Sentiment Analysis Of CORD-19 Dataset

JUNE 2020

- Performed sentiment analysis to extract positive and negative words (Python, Spacy, SciSpacy, NLTK)
- Marked papers as positve and negative (Python, Spacy, Scispacy)

Data Analysis And Visualization **DEC 2019**

Parsed an XML document using Python to visualize data (Python, Pandas, Matplotlib, XML)

Multi-Node Hadoop Cluster

APRIL 2019

Configured a multi-node Hadoop cluster to run MapReduce on various books (Linux, Hadoop)

ACADEMIC ACCOMPLISHMENTS

Dean's List Acquired:

Fall 16, Spring 17, Fall 17, Spring 18, Fall 18, Spring 19, Fall 19, Spring 20

Semester Honors

Acquired: Fall 16, Spring 17, Fall 17, Spring 18, Fall 18, Spring 19, Spring 20

EDUCATION

Purdue University Northwest Bachelor's AUG 2016 - MAY 2020 Computer GPA: 3.71 (CUM LAUDE) Information Technology

Purdue University Northwest PRESENT - SPRING 2021

Master's Technology, MS

SKILLS

Python, Linux, Tensorflow, Numpy, Pandas, PyTorch, MySql, Scikit-Learn, Neural Networks, DNN, RNN, CNN, Reinforcement Learning, NLTK, NLP, Web Crawlers, C, JavaScript, HTML