ETHAN NELSON

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Professional Experience

Senior Associate, Analytics

Jan 2022-Present

iProspect

Remote

- Leading efforts in automation of data delivery by architecting new pipeline logic and managing team of data engineers.
- Solving problems dealing with ad-hoc requests by having a solid understanding of necessary data logic.
- Building data scripts to transform and join data to help case study dealing with 50% unattributed data points.

Software Engineer May 2021-Dec 2021

ARCTEC Solutions

Middleburg, VA

- Automated software installation tasks.
- Created data dissemination tool to pull data from APIs and remote databases to store into a local database.

Data Science Intern

Jan 2021-April 2021

Snow Data Science

Remote

- Used data visualization to create results that were easily interpreted by humans.
- Researched unsupervised machine learning algorithms pertaining to clustering and use of dimensionality reduction (PCA).

Data Reviewer, Annotator

Feb 2020-Jan 2021

Research & Business Development Center

Rexburg, ID

- Conducted research under a Machine Learning Engineer in order to increase working knowledge on machine learning algorithms specifically dealing with neural networks, semantic segmentation, and point cloud classification.
- Built <u>neural network</u> with Point Net and TensorFlow to classify point cloud data to help achieve a fully automated warehouse.

Research/ Projects

Co-Founder AI/ML/CV (AYQA)- Using embedded devices to deploy remote ML models for industrial use. Managing team, leading embedded device software development, and database architecture.

Fault Detection- Research on predicting faults in oil pipelines. Use of unsupervised machine learning and dimension reduction to predict and then visualize groupings. Sponsored by Snow Data Science.

Point Cloud Classification- Use of neural networks to predict classification of point cloud images for use in robotic warehouses. Dealt with lidar imagery.

Technical Experience

- Python 2.7, 3
- Machine Learning, Al
- Deep Learning
- Tensorflow/ Keras

- Dimensionality Reduction
- Computer vision (OpenCV)
- Object oriented (OOP)
- Linux (Ubuntu, RedHat)
- Flask/ HTML/ JS
- Data Science/Analytics
- SQL
- 3D Modeling (Autodesk Inventor)

Education

Georgia Institute of Technology

2022-Present

MS. Science in Computer Science | Specialization in Interactive Intelligence

Remote

Brigham Young University-Idaho

2018-2021

Rexburg, ID

BS. Science in Computer Science