ETHAN NELSON

(770) 689-7042 | ethanisaacnelson@gmail.com | linkedin.com/in/ethan-nelson/ | https://einelson.github.io/ | Secret Clearance

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.
- Engineering new data pipeline that is increasing efficiency in runtime over legacy application by ~250%.
- Solving problems dealing with ad-hoc requests by having a solid understanding of SQL, data transformations and important KPIs. Revamped dashboard to aid in requests and highlight important KPIs.
- 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 neural network 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 CV ML models for industrial use. Leading embedded device software development, implementation of embedded computer vision 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, AI
- 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**
BS. Science in Computer Science   *Rexburg, ID*