ETHAN NELSON

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

Dynamic and versatile machine learning engineer with a robust background in designing, implementing, and deploying AI solutions. Proven track record in leading machine learning and data operations initiatives, with extensive experience in natural language processing, model deployment architecture, and all aspects of the AI lifecycle.

Professional Experience\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Machine Learning Engineer & Data Ops**  Aug 2023-Present

*Stukent*  *Remote*

* Spearhead the design and implementation of end-to-end machine learning and data operations pipelines, including the establishment of SQL data warehouses and governance protocols that enhance data retrieval efficiency through Spark/PySpark and tools like Databricks Unity Catalog and MLflow.
* Architect automated workflows for the training, evaluation and deployment of machine learning models in production environments.
* Develop and fine-tune NLP algorithms, including LSTMs and transformers, with a focus on hyperparameter tuning to classify support tickets, implementing a real-time alert system for engineering teams on bug-related issues within the platform.
* Integrate large language models (LLMs) to interpret student performance data dynamically, enhancing learning outcomes through adaptive model responses.
* Conducted research and proposed ten advanced AI methodologies to enhance platform functionality, culminating in the acceptance of two projects: one leveraging generative AI to elucidate student scores and another focused on developing an intelligent advertisement word scorer.

**Senior Data Analyst**  Jan 2022-Aug 2023

*iProspect*  *Remote*

* Lead efforts in automation of data delivery by architecting new ETL pipeline logic and managing team of data engineers. New pipeline increased efficiency in runtime over legacy application by ~250%.
* Addressed ad-hoc requests with a strong command of Python, SQL, and data transformations, revamping dashboards to enhance visibility of key performance indicators (KPIs) and streamline reporting processes.
* Built scripts to transform and join data to help case study dealing with 50% unattributed data points.

Research/ Projects\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Co-Founder AmyAI (2023)-** Using LLMs and ChatGPT to improve communication between companies and customers by creating and deploying custom RAG pipelines based on customer data. Deploying APIs in Microsoft Azure.

Technical Experience\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Python 3
* Machine Learning
* Deep Learning
* Torch / PyTorch
* NLP & Transformers
* Databricks
* Artificial Intelligence
* Linux (Ubuntu, RedHat)
* SQL/Spark
* Data Science/Analytics
* Microsoft Azure

Education\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Georgia Institute of Technology**  **2022-2025**

*MS. Science in Computer Science | Specialization in Interactive Intelligence Remote*

Notable Classes: Natural Language Processing, Knowledge based Artificial Intelligence, Machine Learning, Quantum Computing, Human Computer Interaction, Machine Learning for Trading

**Brigham Young University-Idaho**  **2018-2021**

*BS. Science in Computer Science Rexburg, ID*

Notable Classes: Machine Learning and data Mining, Computer Vision, Databases, Data structures, Discrete Mathematics, Linear Algebra