Matthew Saad

✉ msaad02@outlook.com | 🔗 in/mattsaad | 🐙 msaad02 | 📍 Rochester, NY

Overview

Machine learning engineer with hands-on experience training models on tens of millions of data points, building scalable pipelines, and deploying inference infrastructure. Deep understanding of model design, data representation, and GPU optimization — bridging research and production.

Skills

Core Languages: Python, SQL, Terraform
Data & Infra Tooling: Apache Spark, Databricks, Azure, Data Lake, Power BI
ML & Gen-AI Tooling: PyTorch, HuggingFace, scikit-learn, TensorFlow, LLMs, PEFT
MLOps & DevOps: Azure DevOps, CI/CD, Docker, Git, model deployment/monitoring

Experience

BI Admin @ Excellus BCBS   *Jun 2024 – Present*

- Primary Azure Databricks admin for 100+ engineers—owned infra, costs, optimization, and platform features.
- Engineered a Spark-parallel ingest of 4 TB from Oracle, reducing costs and runtime by 85%.
- Built Azure DevOps CI/CD (Databricks Asset Bundles + service connections) for simple, version-controlled releases.
- Surfaced Databricks spend by streaming billing logs to Power BI; flagged waste that cut monthly cloud costs 31%.
- Led Spark/compute tuning boot camp for 50 engineers; fixes cut costs 40% on production jobs.
- Published four internal Python libraries (ETL + governance) now used by 60+ pipelines.

Data Science Intern @ Excellus BCBS   *Jun 2022 – May 2024*

- Built two LLaMA-2 based RAG chatbots for querying HR & policy docs; presented to C-suite and secured buy-in.
- Developed a seq-to-seq transformer predicting ICD-10 codes from 80k+ records, improving diagnostic forecasting.
- Refactored and deployed model scoring API, improving efficiency by 60% and reducing compute time.
- Prototyped prior-authorization automation and telehealth call summarization with BERT and T5 models.

Student Employee @ SUNY Brockport   *Aug 2022 – May 2024*

- Teaching assistant (Java OOP, MIPS), math tutor/grader.

Projects

BrockportGPT | Code: msaad02/brockport-gpt   *Apr 2024*

- Created an open-source chatbot for my undergraduate institution using RAG and LLM Finetuning.
- Built a 184M-parameter transformer model from scratch using PyTorch, fine-tuned for domain-specific QA.
- Published research in an IEEE conference paper as part of ICECCME 2024 (paper/publication).

Chess AI Bot | Code: msaad02/chess-ai   *June 2025*

- Trained MLP and CNN models for best move prediction based on open source LiChess game database.
- Engineered highly parallel ETL pipeline for large-scale training, optimizing memory and batch processing.

Education

Georgia Tech
M.S. Computational Analytics   *Starting Aug 2025*

SUNY Brockport
B.S. Computer Science & Mathematics   *Aug 2020 - May 2024*

- Double major with concentrations in Software Engineering and Statistics.
- Honors college; 3.9/4.0 GPA *Summa Cum Laude*.