Jackson Baxter

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EXPERIENCE

Curatus   Nov 2025 – Present
Software Engineer, Analytics and AI - Full-Time   Provo, UT
- Architected a LangGraph multi-agent system to automate mapping for millions of weekly health and provider records, achieving 96% data quality and virtually eliminating manual intervention.
- Developed a high-performance data scoring engine in C++ capable of evaluating billions of records daily, optimizing computational throughput for large-scale healthcare datasets.
- Re-engineered data pipelines to optimize storage architecture, reducing total database volume by 90% (to 10% of original size) while maintaining 100% data fidelity and operational utility.

Software Engineer, Analytics and AI - Full-Time Internship   July 2025 – Oct 2025
- Engineered a data scoring pipeline using Python, Pandas, and NumPy to compare and rank data, increasing customer data quality by 22.5%, to directly drive up customer revenue.

Lawrence Livermore National Laboratory   Sep 2024 – Apr 2025
Software Engineer, AI Engineer - Internship   California (Remote)
- Led a team of 3 engineers to develop a custom Retrieval-Augmented Generation (RAG) system, reducing document search time for researchers from an average of 2 hours to under 5 seconds, saving an estimated $2.86M in annual costs from reclaimed researcher hours and reduced cloud compute expenditure.
- Engineered a serverless data ingestion pipeline using Docling, OpenAI GPT-4o-mini, and Qwen embeddings to process and index complex research documents, increasing data processing throughput by 40%.
- Improved retrieval accuracy by 35% by implementing a novel contextual embedding strategy, directly enhancing the reliability of the AI-powered Q&A system for mission-critical research.

Brigham Young University IT   Sep 2021 – May 2025
Student IT Lead - Full-time and Part-time   Provo, UT
- Led IT infrastructure upgrades for academic departments, including the migration and optimization of database servers, resulting in a 15% improvement in query performance and system reliability.

EDUCATION

Brigham Young University   Graduation – Apr 2025
Bachelor of Science: Computer Science (Emphasis in Data Science and Machine Learning)   Provo, UT

- **Academic Projects:**
    - **AI-Powered Documentation Query System:** Developed a full-stack RAG application adopted by 100+ students to query technical documentation, improving research efficiency. Implemented a serverless AWS pipeline (Lambda, SQS, S3) and used Bedrock Titan Embeddings with OpenSearch for semantic search.
    - **LLM-Powered SQL Query Interface:** Architected a system using GPT-4 to translate natural language into executable SQL, later deployed to support dozens of small businesses in South America. Enabled non-technical owners to retrieve critical business information, improving data accessibility and decision-making.
- **Honors:**
    - **BYU Top Student Scholarship:** Merit-based award given to one of 500+ student employees for exceptional academic achievement and on-the-job performance.
    - **University of Texas Dallas Cyber Security Award:** (Summer 2018) Recognized as the top participant in a competitive high school cybersecurity program.
    - **Business Professionals of America State Placement:** Both C++ Programming and Network Design Team High School Competitions (2017 & 2018).

SKILLS

- **Programming Languages:** Python, Java, Rust, C/C++, JavaScript/TypeScript, R, SQL, HTML/CSS

- **ML & AI:** LangChain & LangGraph, Retrieval-Augmented Generation (RAG), Large Language Models (LLMs), Text Embedding, Semantic Search, MLOps (CI/CD), Supervised & Unsupervised Learning, Scikit-learn, Pandas, NumPy

- **Cloud & Tools:** AWS (Bedrock, SageMaker, Lambda, S3, SQS, OpenSearch), Docker, Git, Linux, PostgreSQL, LanceDB, Redis