

JACOB FOSTER

jacob13foster@outlook.com

github.com/JacobFoster13 • linkedin.com/in/JacobFosterUT/ • (281) 682-6694

EDUCATION

The University of Texas at Austin

Master of Science, Information Technology & Management (GPA: 3.81)

May 2024

Bachelor of Business Administration, Management Information Systems (GPA: 3.96)

May 2023

- Computer Science Minor (21 Hours)

TECHNICAL SKILLS

- **Languages:** Python, SQL, JavaScript/TypeScript (React.js, Node.js), MongoDB, Pandas, NumPy, PySpark
- **Frameworks/Tools:** React, Material UI; REST APIs, Postman, JSON; Streamlit, LangChain, Pytest; AWS Serverless
- **Platforms:** Git (GitHub, GitLab), Databricks, Snowflake, Azure, AWS, Azure DevOps, Jira, Office365 Suite

EXPERIENCE

PepsiCo - North American Deployment - *Data Engineer Analyst*, Plano, Texas

July 2024 - Present

- Maintain and repair ETL data pipelines from 90+ sites to central data lake using Python, Pandas, PostgreSQL, Oracle SQL, Linux, and TIBCO enterprise messaging system, reducing failures by over 60% per month
- Automate SQL reporting on warehouse audits using Python, Pandas, and email integration, reducing manual effort by 80+%
- Develop and deploy Streamlit dashboards to monitor real-time data flow from 90+ cloud and on-prem sites to central DB
- Collaborate cross-functionally with 3 teams, ensuring quality and timeliness of data pipelines delivering business-critical KPIs

Dimond Growth Advisors – *Consultant: Full Stack Engineer*, Dallas, Texas

April 2024 - Present

- Develop responsive, drag-and-drop based UI using React.js, TypeScript, and Material UI, enhancing internal tool usability and meeting regularly with product owner to align on business needs and progress
- Collaborate with lead developer to optimize data flow between Node.js backend and SQL databases

PepsiCo - Warehouse & Transportation Sys. - *Full Stack Engineer Intern*, Plano, Texas

May 2022 - August 2022

- Managed backend development team of 3, leading to 83% reduction in loading times after implementing Node.js
- Modernized 10+ UI pages, including complex table and modal components from React and Material UI, to enhance workflows
- Implemented persistent user authorization and authentication through JSON Web Token for 4 distinct roles
- Migrated thick-client warehouse application to a cloud-based solution in 7-person Agile team for over 20 internal end users

PROJECTS

KORE Wireless - *AI Engineer/Software Developer*, Austin, Texas (Remote).

December 2023 - May 2024

- Built user-facing chatbot using OpenAI APIs in cooperation with product manager to boost customer engagement
- Converted proprietary documents to over 10k vectors stored in scalable Pinecone DB as part of RAG chatbot architecture
- Leveraged semantic cache via cosine similarity on Pinecone DB to reduce API calls and cost by over 20%

Loves' Realty - *Data Engineer*, Austin, Texas

January 2022 - May 2022

- Designed ETL process in Python to transform via Pandas, REST APIs, JSON, updating over 50% of client's MySQL database
- Reduced data refresh cycle from weeks to under 1 hour, enabling real-time decision-making for client property preferences

CERTIFICATIONS

- AWS Certified Developer – Associate (DVA-C02), MS Azure AZ-900, MS Azure Data DP-900, Certified Associate in Python Programming (PCAP)

HONORS & LEADERSHIP EXPERIENCE

- Distinguished College Scholar (Top 4% of class)
- University Honors (7/7 Semesters)
- Longhorn Baseball Club President (2021 – 2023)