Joseph Gress

(262) 202-9070 | jgress1802@gmail.com | linkedin.com/in/joseph-gress | josephgress.dev

Experience

Data Scientist October 2024 – Present
Johnson Controls *Milwaukee, WI*

- Designed and implemented an **Azure LLM landing zone** using **Terraform**, enabling rapid deployment of infrastructure for **LLM** and **RAG-based projects**, streamlining **AI development** across the enterprise
- Developed and maintained **IaC** for a centralized **LLM hub**, hosted on **Azure APIM**, integrating **Azure OpenAI** and **self-hosted models**. This central service supports all enterprise **LLM applications**, providing **load balancing** and **scalability**
- Built and deployed over **100 VAT forecasting XGBoost models** for legal entities within **Johnson Controls**, automating the entire **ML lifecycle** using **Azure Machine Learning** and **Azure DevOps**. This includes **data preparation**, **model registration**, **training**, and delivering insights stored in **Snowflake** for **Power BI dashboards**
- Engineered a **legal contract analysis agentic system** leveraging **GPT-4o**, **prompt engineered** with **JCI Legal Strategy**, to review **NDAs** and **contracts**, identifying areas requiring **redlining** and saving the legal team an estimated **33%** of their contract review time.

Solution Architect Intern April 2024 – October 2024
Johnson Controls *Milwaukee, WI*

- Played a key role in the development of a **sales copilot (RAG)**, primarily utilizing **Azure OpenAI (GPT-4o)**, **Azure AI Search**, **Azure ML Prompt Flow**, **Azure Blob Storage**, and **Azure Document Intelligence** to save an estimated 15% of our sales rep's time spent searching documents
- Presented our sales copilot to the **CEO**, **CIO**, and **CTO** of Johnson Controls, earning recognition and securing a **funding allocation** to advance the project from POC to Pilot
- Inventor on the patent: **Systems and Methods for Simulating Building Equipment Operation Using Generative Artificial Intelligence Model** (Currently Being Filed)

Data Analytics Intern May 2023 – April 2024
Johnson Controls *Milwaukee, WI*

- Developed a **React Azure DevOps** extension with a **.NET 6** backend, utilizing an **Azure App Service**, **Azure Functions**, **Azure SQL**, **Azure Data Factory**, and deployed with an **Azure DevOps pipeline**
- Utilized **spaCy**, **pandas**, and **gensim** in analyzing over 10,000 user comments, helping to identify key areas of improvement and aid funding allocation for fy24
- Built an **LLM** driven summarization tool using **GPT-3.5 Turbo** and **spaCy** to summarize and categorize user comments, enabling quick and easy access to insights

Education

University of Wisconsin - La Crosse Sept. 2021 – Dec. 2024
B.S. Computer Science, Mathematics minor *La Crosse, WI*

- **Honors**: Dean's List, JLS Scholarship

Milwaukee School of Engineering Jan. 2025 – May 2027
M.S. Machine Learning *Remote*

Projects

BERT Fine-Tuning | *Hugging Face Transformers, Python, Pytorch, Pytorch Lightning* March 2024

- Fine-tuned a pre-trained BERT model on a dataset of 50,000 movie reviews to produce an extractive summarization
- Implemented a custom data processing pipeline to preprocess and tokenize the reviews, and fine-tuned the model using a sequence-to-sequence architecture with attention mechanisms

Technical Skills

Languages: Python, C#, C, Javascript, Typescript, Java, SQL
Technologies: Angular, React, NodeJS, .NET, Pytorch, Scikit-learn, Hugging Face, Transformers, Semantic Kernel
Tools: Github, Azure, OpenAI, Terraform, Power BI, Snowflake, Docker