

Joseph Gress

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

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

EXPERIENCE

Data Scientist

October 2024 – Present

Johnson Controls

Milwaukee, WI

- Practicing modern DevOps methodologies within a Scrum team, utilizing **Azure DevOps** and **Terraform** to implement **CI/CD pipelines**, **IaC**, and version control, enhancing the efficiency of developing and deploying machine learning models
- Collaborating with cross-functional teams, including data scientists, developers, and business analysts, to gather, define, and leverage data for training machine learning models

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 the 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
- Wrote **Terraform IaC scripts** to provision **Azure cloud infrastructure** and building **Github Actions CI/CD pipelines** for multiple applications, bringing them into compliance with enterprise standards
- Inventor for 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

PROJECTS

Kaggle Cancer Detection | *Pytorch, Pytorch Lightning*

May 2024

- Leveraged transfer learning by training a **ResNet-18** model on a Kaggle dataset for the classification of cancerous cells, achieving a high classification accuracy of **92%**
- Developed a lightweight, custom version of ResNet tailored for binary classification tasks, utilizing **convolutional** and **residual blocks** with **maximum pooling** and **adaptive pooling** strategies for an **86% accuracy**
- Experimented with **data augmentation** and **hyperparameter tuning**, including adjustments to learning rates and optimizer configurations, to enhance model performance and accuracy

Job Search Engine | *Angular, NodeJS, MongoDB, AWS*

July 2023

- Built a user-friendly, **MEAN Stack** web application integrating the USA Jobs API and supporting profile management, user administration, and advanced search capabilities
- Visualized data from the CareerOneStop API using **Angular Charts** to provide useful insights on salaries, projected employment growth, and top industries hiring for specific occupations

TECHNICAL SKILLS

Languages: Python, C#, C, Javascript, Typescript, Java, SQL

Technologies: Angular, React, NodeJS, .NET, Pytorch

Tools: Github, Azure, OpenAI, Terraform, Power BI