Arthur Eric Krieger

kriegear@umich.edu (734) 865-0633 Website: https://needless2say.github.io/

Objective

Forward-thinking individual with refined interpersonal and multitasking skills. Interested in a software or Full Stack development internship to utilize my passion for high-tech computing technologies, to support the company's growth, and to gain more experience in applications of software and Full Stack development.

Education

University of Michigan - Ann Arbor, MI

GPA: 3.85/4.0

• Computer Science Major College of Engineering

September 2022-Present

Applied Statistics Minor Literature Science and the Arts

Japanese Minor

Michigan State University - East Lansing, MI

GPA: 3.93/4.0

• Computer Science Major, Honors College, College of Engineering

September 2021-May 2022

Experience

Revantage, a Blackstone Portfolio Company – Chicago, Illinois: Willis Tower

June 5th 2023 - August 11th 2023

Paid Internship - Data Engineer Intern

- Apart of a scrum team using Agile methodology following a full SDLC; responsible for delivering functionality in the financial space
- Documented information on confluence for pipeline triggers and tables associated with schemas and published in Revantage Confluence account
- Wrote python and SQL in Databricks using Azure DevOps RESTful API to retrieve a list of changes to a software application and created a table to query using SQL for data mining
- Researched External Tables to implement into a project to reduce time and costs and bypass transferring data to Snowflake from Azure
- Wrote python and SQL in Databricks to implement functionality for external tables in the software application, drew diagrams in lucid charts to overview External Tables research, and wrote documentation for how to implement External Tables and published documentation in Revantage Confluence account
- Technologies Used: Databricks, Azure, ADO, ADF, Snowflake, SQL, Python, Jira
- Presented to stakeholders at the end of each 3 week sprint

EECS 445 - Introduction to Machine Learning

Sept 2023 - Present

Learning numpy and pytorch and applying coding skills to 2 projects involving machine learning concepts

EECS 492 - Introduction to Artificial Intelligence

Sept 2023 - Present

• Learning basics of AI and applying coding skills to implement AI concepts

Autonomous Robotic Vehicle Club – University of Michigan Ann Arbor *Member*

Sep 2022 – Present

• Member of sensors team responsible for analyzing/processing raw data from the robot's GPS sensor, and sending position signals to the navigation team for the robot to perform specific tasks.

Dept of Obstetrics & Gynecology, Wayne State University – Detroit, MI

Sep 2021 - August 2022

Paid Internship - Research Assistant

- Used R to research gene expression rates of patients and automatically create box plots and graphs used in a research paper titled Prevalence, Demographic Characteristics and Outcomes of Women with Preeclampsia with and Without Abnormal Angiogenic and Anti-Angiogenic Factors. The research paper is currently in the process of being published.
- Created an app using Rshiny library in R to generate a graph based on data that is pulled from an SQL database. Used by researchers in lab to plot and visualize data in a fast and efficient manner
- Technologies Used: R, Microsoft Excel, Microsoft Word
- R Libraries used: ggplot2, dplyr, tidyxl, readxl, openxlsx, tidyverse, tidyr

Personal Projects

- Gacha Game Database Personal Project Full Stack
 - HTML, CSS, Javascript/TypeScript, and Angular to build front end to dynamically display increasing list of game information
 - RESTful API to connect Front to Back-End, and Python to parse custom JSON files containing data and dynamically build
 SQL queries to store data in Microsoft SQL Server using 1-many relationship model with look-up tables
- Calorie Counter Personal Project Full Stack
 - Read in JSON files containing data of food consumed
 - Query Microsoft SQL Server to retrieve nutrition facts for food consumed
 - o Calculate total nutrition facts for the day and output specified format

School Projects

- Euchre Project University of Michigan Ann Arbor EECS 280 Fall 2022
 - o Learned Euchre and coded card game in C++ using polymorphism, inheritance, data structures, and algorithms
 - Wrote simple AI to play card game against player based on Euchre card priority rules
- Piazza Classifier Machine Learning University of Michigan Ann Arbor EECS 280 Fall 2022
 - Classify a Piazza post based on words in test data
 - o Stored data from training dataset in maps based on unique words and titles of posts that words correspond with
 - O Used data to predict title of a Piazza post based on types of words used in testing dataset

Certifications and Skills

- Microsoft Certified: Azure Fundamentals August 2023
- Academy Accreditation Databricks Lakehouse Fundamentals August 2023
- Proficient C/C++, Python, SQL, HTML, CSS, JavaScript, R, PySpark, Pandas, Snowflake, Azure Portal, Azure Data Factory, Databricks, RESTful API, JSON, Confluence, Jira, Agile, Lucid Charts, Microsoft Excel, Microsoft Word
- Beginner AWS, Google Cloud Programming, Docker, Angular, React, TypeScript, FAST API, Linux, Power BI, Japanese