Arthur Eric Krieger

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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: 3.86/4.0

- 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 – August 11th

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 about numpy and pytorch and will be coding several projects to utilize and learn more about numpy and pytorch

EECS 492 – Introduction to Artificial Intelligence Sept 2023 - Present

- Learning about the basics of Artificial Intelligence and will be coding several project to show my understanding of AI

Autonomous Robotic Vehicle Club – University of Michigan Ann Arbor Sep 2022 – Present

Member

- 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 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 SQL Server using 1-many relationship model with look-up tables

Calorie Counter – Personal Project - Full Stack

- Input - food info text file and food eaten text file
- Output – nutrition facts text file

School Projects

Euchre Project – University of Michigan Ann Arbor EECS 280 Fall 2022

- Learned Euchre and coded card game in C++ using polymorphism, inheritance, and algorithms
- Wrote simple AI to play card game with me based on Euchre card priority rules

Piazza Post Classifier Machine Learning – University of Michigan Ann Arbor EECS 280 Fall 2022

- Machine learning project to classify a Piazza post based on words in test data
- Stored data from training dataset in maps based on unique words and titles of posts that words correspond with
- 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
- Proficient – C/C++, Python, SQL, HTML, CSS, 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, Angular, JavaScript, TypeScript, FAST API, Linux, Power BI, Japanese