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: 3.75/4.0
- Computer Science Major College of Engineering   September 2022–Present
- Data Science 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

Charles Schwab – Lone Tree, Colorado   June 3rd 2024 – August 2nd 2024
Paid Internship - Data Engineer Intern
- Part of a scrum team using Agile methodology following a full SDLC; responsible for creating dashboards for data operations
- Delivered interactive dashboards that display data operations for data pipelines and data profiling metrics
- Wrote python scripts to connect to and query Snowflake for desired data for desired data pipeline metrics
- Deployed Streamlit dashboards in Snowflake environments
- Wrote Confluence pages for Streamlit dashboards describing usage, set-up, architecture, and deployment steps
- Demoed to Wealth Asset Management Research Analytics and Reporting Engineering team at end of internship
- Presented a research plan on how Schwab can use generative AI to synthesize data to improve fraud protection
- Technologies Used: Python, Streamlit, Snowflake, SQL

Revantage, a Blackstone Portfolio Company – Chicago, Illinois: Willis Tower   June 5th 2023 – August 11th 2023
Paid Internship - Data Engineer Intern
- Part of a scrum team using Agile methodology following a full SDLC; responsible for delivering functionality in the financial space
- Wrote confluence pages 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, 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
- Presented to stakeholders at the end of each 3 week sprint
- Technologies Used: Databricks, Azure, ADO, ADF, Snowflake, SQL, Python, Jira

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

- Krieger API – Full Stack
  - Front-End: Building websites, such as calorie tracker and video game database, using Next.JS
  - Back-End: Building API using FastAPI to serve data to all websites that I build
  - Database: Using PostrgreSQL database to serve and store data
  - Technologies Used:
    - HTML, Tailwind CSS, Typescript, React, Next.JS, FastAPI, PostrgreSQL, Python

School Projects

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

- 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
- Academy Accreditation Databricks Lakehouse Fundamentals – August 2023
- Proficient – C/C++, Python, SQL, HTML, CSS, Tailwind CSS, JavaScript, TypeScript, React, Next.JS, RESTful API, FastAPI, SQL, Alembic, Snowflake, AWS, Azure, Databricks, Streamlit, Pandas, Pytorch, Tensor Flow, R, JSON, Jinja, Confluence, Jira, Agile, GitHub, Microsoft Excel, Microsoft Word, Japanese
- Beginner – GitHub Actions, Bitbucket, Google Cloud Programming, Docker, Angular, Linux, Power BI