Akshai Narayan Srinivasan

(425) 837-2049| akshai.n.srinivasan@gmail.com | https://www.linkedin.com/in/akshai-n-srinivasan/ |
https://akshainsrinivasan.wixsite.com/portfolio | https://github.com/akshaisrin

Education

The University of Washington **Seattle, WA**
Current, B.S. in Computer Engineering *Exp. Grad: June 2027*

Relevant Coursework: Data Structures and Algorithms, Advanced Software Projects, Multivariable Calculus, Advanced Multivariable Calculus, Linear Algebra, Intro to Scientific Computing, I2 AI/ML Crash Course, Discrete Mathematics (Planned), The Hardware Software Interface (Planned)

Experience

Software Development Intern, Jaggernaut Wealth Services LLC Jun 2024 – Sep 2024

- Built Python-based automated futures trading system that calculates optimal buy/sell quantities based on daily closing prices and portfolio holdings, streamlining trading execution
- Implemented a dynamic rolling algorithm for 40+ futures, calculating and optimizing roll dates to minimize volatility and ensure seamless contract transitions
- Developed a custom back-adjusting and back-testing framework to generate continuous and discrete data files for each future based on rolling algorithm and evaluate/refine strategy performance

Research Intern, Florida International University Sep 2022 – Jun 2024

- Conducted NLP research to create software that detects literary motifs (recurring symbolic elements) in folktales
- Trained Bert-based sentence transformers to apply a semantic search on literary texts, enabling an accurate and efficient identification of thematic elements

Full Stack Intern, goEzz Ride Services for Children Jun 2022 – Sep 2022

- Developed frontend and backend code for a mobile ridesharing application for Android devices in Android Studio
- Created UI using Flutter and Dart according to design specifications and integrated it with a Node.js-based backend
- Architected backend system using RESTful APIs to pull data from a remote MySQL database containing driver/schedule information and display it on-screen

Software Engineering Intern, Quantel AI Inc. Jun 2021 – Sep 2021

- Developed Python software to analyze news feeds and explain price variability in S&P 500 stocks
- Utilized the Stanford CoreNLP library to perform sentiment analysis on relevant articles and ascertained the reason for significant price changes past a given threshold. Results were written to a PostgreSQL database

Projects

FitFinder Oct 2024

- Created mobile fashion social media app for Android devices that classifies users' styles with a Tinder-like algorithm, connects people with similar fashion tastes, and provides engaging fashion content
- Designed PostgreSQL database and Python/Flask backend to pull and insert relevant user information
- Integrated app with AWS Bedrock to provide AI-generated style classifications based on style preferences and AWS S3 to store dataset for style classification algorithm

CalcMaestro.com Jan 2023

- Created website for my calculus test-prep company providing students with subscription-based automatically generated calculus practice worksheets
- Designed and developed a calculus engine able to perform differentiation and integration symbolically, and generate, solve, and provide explanations for hundreds of thousands of calculus problems
- Implemented a cross-domain authentication system that leveraged web-based authentication tokens to grant secure access to problem set PDfs hosted on a remote third-party domain (AWS S3)
- Developed serverless backend in AWS Lambda to process API requests from the frontend and leveraged AWS DynamoDB for secure storage and management of authentication tokens

Technical Skills

Languages/Tools: Python, Java, JavaScript, C# (.NET), Dart, TypeScript, HTML, MATLAB, LaTeX
Frameworks/Libraries: Node.js, Flutter, Pandas, NumPy, Stanford CoreNLP Library
Technologies/Skills: MySQL, PostgreSQL, MongoDB, AWS (Lambda, DynamoDB, EC2, S3, Bedrock), Postman, Full-Stack Mobile + Desktop App Development, Natural Language Processing