Aashwin Katiyar

5853196399 | ak2577@rit.edu | linkedin.com/in/aashwin-katiyar-104b58183

SUMMARY

Motivated Computer Science student with 1 year of industry-level experience in software development seeking a full-time or internship opportunity in Software Development.

EDUCATION

Rochester Institute of Technology
Bachelor of Science in Computer Science
Expected August 2023 | Rochester, NY

SKILLS

Programming:
Python3 • C • C# • Java • JavaScript • HTML • CSS • .NET • MySQL • PostgreSQL • MongoDB • Bash • Maven • Spring Boot

Web Technologies/Frameworks:
Node.js • React • Angular • Vue • ExpressJS • Tailwind CSS • Material UI • Charts.js • RESTful API • P5js • WebGL

Python Frameworks/Libraries:
Pandas • NumPy • NLTK • Django • Dash • Plotly • Tweepy

Software/Services:
Jira • Confluence • Git • GitHub • Anaconda • Azure • Datadog • Linux • Postman • Blender • Maya • Unity

WORK EXPERIENCE

CRESTRON ELECTRONICS INC.
Software Engineer Intern (Remote)
January 2022 – December 2022 | Rockleigh, New Jersey

- Created a dashboard application written in python, to display vital information for IoT devices.
- Utilized the python dash framework and deployed it to Azure Functions.
- Extracted the information from Datadog and Streambase using REST API and further enriched the data using pandas dataframes to display it on various components.
- Increased the performance by rewriting the entire application into JavaScript, ReactJS, tailwind CSS, and Material UI using self-taught learning to progressively enhance the application, within the guidelines of the Scrum Methodology, and used DevOps CI/CD to deploy it to Azure Static Web Apps.
- Performance increase enabled the frontend to display data in 1 second as compared to 20 seconds with the python dash server.

TECHNICAL PROJECTS

Sentiment Analysis Algorithm (Internship, Interview Project)
- Created a sentiment analysis algorithm that utilizes basic natural language processing to provide a polarizing weightage (in percentage) to tweets extracted from Twitter.
- Coded the algorithm in python and used libraries like nltk (for NLP), pandas (for dataframes) and Tweepy (for extracting tweets from specific accounts using the Twitter API).

E-store Website (Academic, Group Project)
- Designed and coded an e-store website about fictional pets.
- Utilized Angular and Tailwind CSS to build the front-end and the java Spring Boot for the backend.
- Stored the user and product data in separate JSON documents.

Java TCP/UDP Server (Academic)
- Coded a TCP ServerSocket server in java that parsed and accepted GET and POST requests from a client and performed the associated operations.
- Improved the performance of the server by creating a UDP server that wrote and transmitted large data files to and from a client.
- Implemented sliding-window error checking protocol for the UDP server to ensure order of the packets.

Encryption Messenger Server (Academic)
- Created a C# HTTPS server that used asynchronous code to simultaneously listen for REST API requests (GET, POST, PUT).
- Implemented the RSA encryption algorithm that generated cryptographically strong prime numbers using the C# BigInteger class to encrypt message string and convert it into Base64 bytes of data for transmission of the public key.
- Coded the server to create private and public keys to send and receive encrypted messages with other servers built on the same logic.

Movie Simulation (Academic)
- Designed a CLI python application that uses PostgreSQL and SQL queries to perform basic CRUD operations.
- The application lets a user search for movies using a catalogue that was created from a dataset from Kaggle.
- Performed Exploratory Data Analysis using synthetic data and technologies like Pandas, Plotly, NumPy to generate interesting graphs.

Discord Bot (Personal)
- Coded a discord bot in Python that utilizes the discord bot API through the discord python library to output phrase specific data when certain keywords are sent to a text channel. Deployed the bot to Heroku.
- Coded asynchronous functions to simultaneously listen for user requests in a non-blocking way.
- Utilized the ytdl and FFMPEG python libraries to add functionality for playing music.

[More projects available on LinkedIn]