Aashwin Katiyar

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| 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. | 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](https://www.linkedin.com/in/aashwin-katiyar-104b58183/)] |
| EDUCATION  **Rochester Institute of Technology**  Bachelor of Science in Computer Science  Expected August 2023 **|** Rochester, NY |
| SKILLS  **Programming:**  Python3 • C • C# • Java • JavaScript • TypeScript • 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 • Agile • 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. |