Rohan Tipnis

7778 Lowrance Rd, Memphis, TN 38125

admiralstone.github.io

Education

University of Texas, Arlington

Aug 2021 - Dec 2023

Masters of Science in Computer Science

Arlington, Texas

Data Structures, Distributed Systems, Algorithms Analysis, Database Systems, Artificial Intelligence, Software Engineering, Game Development

Technical Skills

Languages: C++, Python, C, HTML/CSS, JavaScript, GO, C#

Tools/Frameworks: NodeJs, React, VueJs, AngularJS, Unity, Git, Nginx, Postman, MySQL, MongoDB, JMeter

Experience

Bright Mind Enrichment

Feb 2024 - Present

Software Developer

- Spearheaded the implementation of dynamic data binding using JavaScript, significantly enhancing user interactivity and boosting engagement by 30%
- Translated detailed Figma mockups into responsive HTML and CSS pages, resulting in a 25% improvement in mobile usability and overall user experience
- Integrated Firebase for data storage, designing schemas and data access services, reducing data retrieval time by 20% and streamlined backend operations

University of Texas at Arlington

Apr 2022 - Aug 2022

Graduate Research Assistant

Arlington, Texas

- Developed programs to interface and collect data from various bio-medical sensors using Python
- Created client-server services for robotic components using Python, C++, and ROS, enhancing system reliability
- Organized an international conference with 200+ attendees, managing logistics and technical setup
- Used HTML, CSS, and Git to manage and deploy the websites for the PETRA conference and Heracleia Lab

Maharashtra Knowledge Corporation Ltd

Aug 2019 - May 2021

Full Stack Software Developer

Navi Mumbai, India

- Developed user interfaces for web applications with VueJS and AngularJS, supporting 25,000 daily users
- Designed and implemented server-side code and REST APIs within a micro-service architecture, improving system scalability by 40% in **NodeJs** and **Go**
- Deployed application builds on staging servers and performed nginx configurations
- Adapted to requirement changes in an agile environment and delivered quality software within deadlines
- Redesigned AJAX-based bidding system using websockets in Go, scaling real-time supported users from 300 to 1 million

Projects

Ember Engine (In Progress) | C++, SFML

June 2024

- Currently designing and developing a custom 2D game engine focusing on performance and scalability
- Implementing core engine components including rendering, input handling, and Scene Management
- Developing a flexible asset management system to handle textures, audio, and other resources efficiently
- Creating comprehensive documentation and a detailed ReadMe to facilitate open-source contributions

StreamLink | NodeJs, PostgreSQL

May 2024

- Architected and developed a backend for a live streaming platform using NodeJs, Express, PostgreSQL and WebSockets for seamless user experience
- Designed routes allowing users to login, sign up, edit profile all supporting secure **JWT middle-ware** for enhanced security
- Implemented PostgreSQL for data management, achieving seamless data persistence and retrieval, which enhanced the responsiveness and reliability of the API

Personal Task Manager | Vue.js, NodeJs, MySQL

Jan 2023

- Engineered a task management application with Vue.js to facilitate adding, organizing, and prioritizing tasks
- Developed a robust backend using Node. is and MySQL, focusing on efficient data handling and application state management
- Crafted an intuitive UI with Vue.js, facilitating a seamless user experience and easy navigation through tasks