Anusha Lavanuru

LinkedIn: anusha-lavanuru-532b90179 | GitHub: AnushaLavanuru5 | Email: al4568@columbia.edu | Phone: 3477515693

EDUCATION

Columbia University, New York

Expected Dec 2024

- Master of Science, **Computer Science**
- Courses: UI Design, ML, NLP, Algorithms, Databases, VR/AR, Computer Graphics, Human Computer Interaction
- Teaching Assistant: UI Design (Fall '24), Introduction to Databases (Spring '24), Computing in Context (Fall '23)

Gokaraju Rangaraju Institute of Engineering and Technology, India

July 2017 - May 2021

- Bachelor of Technology, Computer Science and Engineering
- Courses: Algorithms, Data Structures, Al, Advanced Calculus, Probability and Statistics, Big Data, OS, Networks

SKILLS

Languages: C, C++, Java, Python, React, JavaScript, TypeScript, SQL, postgresQL, AWS, HTML, CSS

Tools: SpringBoot, Git, Figma, Scala, Jira, Jenkins, Conference, Unity, Blender, OpenGL Python Libraries: OpenCV, Pandas, NumPy, Scikit, matlab, TensorFlow, MySQL, Pytorch, NLTK

WORK EXPERIENCE

Research Assistant | Computer Graphics and User Interfaces Lab

Sept 2024 - present

- Developed **React** and **Spring Boot** based full-stack features for a geospatial app, integrating **RESTful APIs** for real-time data visualization
- Optimized UI performance by 30% using React Hooks, lazy loading, and server-side caching with Spring Boot
- Built scalable backend services with Spring Boot, PostgreSQL, and secure session handling for dynamic data processing
- Enhanced XR environments using **Unity**, **Blender**, and **OpenGL**, enabling seamless interaction between 2D/3D views and back-end systems

Research Assistant | Computer Enabled Abilities Lab

May 2024 - present

- Built a full-stack AR application using Unity, Blender, ReactJS, and Spring Boot, integrating real-time data with RESTful APIs
- Designed a scalable PostgreSQL database to store dynamic historical data and ensured secure data handling with Spring Boot's session management
- Optimized application performance with **React Hooks**, **lazy loading**, and efficient state management, reducing load times by 30%
- Delivered seamless AR experiences by integrating 3D assets with real-time data rendering and back-end services for interactive user engagement

SDE Intern | NomadFi May 2024 - Sept 2024

- Built modular React components for a fintech platform, including the homepage, dashboard, and settings
- Utilized React Hooks, Context, and Redux for advanced state management, enhancing user experience
- Integrated Spring Boot APIs to optimize performance, reducing data fetch latency by 25%
- Developed an OCR system in Python and Spring Boot, automating invoice processing and structuring data in an SQL database

Software Engineer | Shure Audio Technologies

Aug 2021 - Aug 2023

- Designed and implemented scalable software features for the **Designer NextGen** platform using **Python**, **Flask**, and **PostgreSQL**, enhancing system reliability by 25% and supporting 35+ new functionalities
- Automated 100+ test cases by building reusable frameworks with **Selenium**, **Pytest**, and **CI/CD pipelines**, reducing manual QA time by 70% and ensuring seamless deployments
- Developed backend services for licensing systems and integrated them with a **React** front-end, enabling a 40% increase in software sales and Shure's first \$1 billion revenue milestone
- Refactored legacy codebases to improve performance by 30%, incorporating **RESTful APIs**, **Redis** for caching, and containerized deployments with **Docker** and **Kubernetes**

PROJECTS

NomadFi

Sept 2024

• Led a team of 3 to build a full-stack asset tokenization platform with ReactJS, Redux, Material-UI, and a Spring Boot backend using PostgreSQL and RESTful APIs, reducing data processing time by 25%

FitBlend

June 2024

• Developed a user-friendly **UI** application called Fit Blend using **ReactJS** to help users explore and understand smoothies, incorporating interactive features and real-time data integration for enhanced user experience