VISHAL SRINIVASAN

Portfolio · ► +91 8248910030 · in LinkedIn · In Linked

EDUCATION

Indian Institute of Information Technology, Senapati

Senapati

B.Tech Computer Science and Engineering (CGPA - 8.01)

Apr 2022 – Apr 2026

Work Experience

Orbol Co (Paid)

Ahmedabad (remote)

 $Backend\ Development\ Intern$

May 2024 - Oct 2024

- Developed the backend from scratch for a MERN stack web application and integrated with frontend, leveraging CDN-based storage to reduce page load time by up to 70% and improve user experience.
- Designed and optimized MongoDB schemas by implementing indexes on frequently queried fields, resulting in up to a 10x faster query execution time for key operations.

Repsoft Global Ltd (Paid)

Hyderabad (remote)

Development Intern

May 2024 – Jul 2024

- Engineered an optimized backend for the Admin Panel using PHP & SQL, enabling real-time webpage updates and achieving up to 30% faster load times.
- Integrated secure **password authentication** with cookie-based **session management**, enhancing user experience and satisfaction by over **60%**.

SKILLS

Frontend Development: ReactJS, NextJS, JavaScript, Typescript, CSS3, HTML5

Backend Development: NodeJS, ExpressJS, NestJS, Django, REST APIs **Database Management**: MySQL, MongoDB, PostgreSQL, TypeORM

Programming Languages: Python, C++, Java, C

Version Control & Tools: Git CLI, GitHub, Docker, Jest, Excel, Word, PowerPoint

Projects

HealthApp | ReactJS, MongoDB, NodeJS, ExpressJS, Google AI Studio |

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- Tracks nutritional contents in food, implements **Markov model** for next food prediction, increasing user convenience by over 40%.
- Ensures data protection using **BCrypt and JWT**, and integrates **Gemini-1.5-flash-8b** chatbot for general health query assistance, enhancing user experience by over 20%.

Optimal Ship Navigation Algorithm | Python, Pygame, Pandas, NumPy |

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- Engineered a hybrid routing system using **A* Algorithm** and **Random Forest Regressor** to determine optimal ship routes in approximately 85% less time, improving transit efficiency and speed.
- Leveraged geospatial bathymetry and changing environmental factors to tailor routes for both cargo and passenger vessels reducing route deviations due to environmental interference by over 75%.

Advanced Copy-Paste VS Code Extension | JavaScript |

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- Implemented new copy-paste functionality with custom **key mappings** featuring multiple **data structures** and enhancing user convenience by over 60%.
- Published on the VS Code Extension Marketplace with 10+ active users and ongoing feedback integration.

AgriSense | Streamlit, Firebase, TensorFlow, PyTorch, OpenWeatherMap, Node-Red |

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- Developed a CNN model for disease detection from images with an accuracy of over 84%, tailored for smallholder farmers and incorporated drone-based hyperspectral imaging for crop monitoring, increasing field coverage speed by 20× and reducing dependency on manual inspection.
- Implemented Email OTP authentication and automated data collection mechanism, streamlining recordkeeping and reducing manual data entry by 100%.

Awards

• MTI Hackathon Winner, Ahouba 2.0 Hackathon Winner, SIH'24 Finalist, GDG Hackathon 2nd Runner-Up

LEADERSHIP & COMMUNICATION SKILLS

- Team Leader in all hackathons participated, consistently leading the team to podium finishes.
- Lead Organizer of the Competitive Programming Contest at IIITM'24, attended by 750+ people.
- Director of Model UN Conference at school, attended by 450+ students.