AYUSH JHA

Software Developer

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PROJECTS

ELEVATE DELHI

Intelligent Elevator Optimization Platform

Aug 2023 - Jan 2024

- **Problem Statement** Traditional elevator systems lacked an efficient algorithm for minimizing wait times and **optimizing travel paths**, leading to energy consumption and travel time
- Engineered an algorithm in C++ using STL and BOOST, simulating a 40% decrease in wait times and a 25% increase in system reliability
- Developed path Algorithm, leveraging DSA principles, predicting a 30% reduction in travel time & enhanced operational efficiency
- Utilized mathematical analysis to estimate, on implementation of the algorithm through microcontrollers a 20% increase in overall energy efficiency and system performance

NOVA **DELHI Website Automation Platform JULY 2023 - AUG 2023**

- Problem Statement Non-technical users encountered barriers in quickly creating personalized websites
- Built backend & user-friendly frontend using Node.js, Express.js, MongoDB, and React.js, enabling a 30% faster website creation process
- Developed advanced features for customization through user prompts, code generation of user created website & deployed the system with version control through Git & AWS
- Performed extensive testing through Mocha, RTL, Passport.js. Utilized Swagger, npm for enhancement of backend functionality

VERIF-EYE DELHI MAR 2023 - MAY 2023

Authenticity Assurance App

- Problem Statement -Mass distribution of counterfeit products through fraudulent sellers needs a check by a real-time authenticity calculator
- Designed product authentication solution using MERN stack, RESTful API, Mongoose & Redux for precise accuracy in app functionality
- Leveraged advanced image recognition with OpenCV & PyTorch, integrated SSL encryption, Firebase for real-time updates, Google maps API for location-based handling
- Functioning of app basis inputs from image, data, location of product & data calculation providing accurate authenticity result on good

FORECAST-IQ DELHI Stock Price Predictor Algorithm DEC 2022 - FEB 2023

- **Problem Statement** Unpredictable stock markets require reliable forecasting for safer investments
- Developed a trading program utilizing predictive algorithms to forecast stock prices, leveraging Python libraries such as Pandas, NumPy, Scikit-learn, PyTest, PyTorch, and QuantLib for data analysis and model training
- Demonstrated proficiency in API integration by seamlessly incorporating Bloomberg API and AWS services, enabling real-time data retrieval, cloud scalability, and regulatory compliance in the trading program

EDUCATION

B. Tech, Delhi Technological University

2022-2026

[Microprocessor & Interfacing, Computational Optimization, Digital Electronics, Communication Systems]

ADDITIONAL INFORMATION

•	Programming Mentor, IEEE - Mentored 200+ students in Programming (C++, Python,	DSA) Sep - 2023
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Winner of national level street dance battle 'NachYudh' at IIT Bombay Dec - 2023

Team Leader at VIBE, Dance Crew of Delhi Technological University Aug - 2023

Indian Vocalist at Madhurima, Musical Club of Delhi Technological University Feb - 2023

Led football team to win 2nd position in state level tournament by Delhi Soccer Association Feb - 2022