TRUPTI K N

+91 9606304110 ⋄ Karnataka, IN

edu.trupti11@gmail.com ⋄ linkedin.com/in/truptikn

CAREER OBJECTIVE

Detail-oriented and motivated Computer Science graduate with a strong academic background and a portfolio of impactful technical projects and internships. Seeking to contribute to innovative software solutions in a dynamic organization while continuously expanding knowledge in development, problem-solving, and emerging technologies.

EDUCATION

B.E. in Computer Science and Engineering – 9.04/10 CGPA 2021 - 2025
Jawaharlal Nehru New College of Engineering, Shivamogga, Karnataka

Pre-University Education / XII (PCMB) – 99.0% 2019 - 2021
Expert PU College, Mangalore, Karnataka

SKILLS & CERTIFICATIONS

Technical Skills C, Python (pandas, numpy, matplotlib), Java, SQL, HTML, CSS, Data Analysis, Tableau, Power BI, Data Visualization.

Soft Skills Leadership, Strong analytical thinking, Communication, Teamwork, Problem-solving, Strategic thinking, Presentation and Public speaking, Event Lead and Management.

Certification Deloitte Australia Data Analytics | Forage
Java Full Stack | Wipro
Cyber Security | IBM
Enterprise Design Thinking Co-Creator | IBM
Communicating with impact | IBM
Programming Combo Skill Program| VTU

WORK EXPERIENCE

Software Developer Intern – Ekathva Innovations. Feb 2025 - May 2025

- Designed an AI-powered HR chatbot interface with data collection and analysis features to improve query response accuracy
- Collaborated with product teams to build data-driven workflows using Python and Streamlit

Cyber Security Intern - IBM Oct 2023 - Nov 2023

- Created a Python-based image steganography tool demonstrating secure data processing and hashing
- Gained hands-on experience in data integrity and quality assurance

PROJECTS

AI-Powered HR Chatbot Interface *Mar 2025 – May 2025*

- Built a React-based front-end chatbot interface that connects to a Python backend hosted on Streamlit.
- The system was designed to handle and respond to frequently asked HR queries like leave balances, approval status, and policy information using pre-defined conversation flows. Integrated basic NLP handling for user input parsing. Focused on optimizing user interaction time and reducing human intervention for repetitive queries.
- The chatbot was tailored to simulate real-time HR service interactions and demonstrated how AI can streamline internal operations within organizations.
- Tools: React.js, Streamlit, Python

Air Quality Index Prediction: A Multi-Model Regression Approach *Sep 2024 – Dec 2024*

- Developed a comprehensive AQI forecasting system using multiple regression models such as Extra Trees Regressor, Support Vector Regressor (SVR), LightGBM, and CatBoost to predict city-level air pollution levels.
- Conducted detailed exploratory data analysis (EDA) and handled large datasets with missing values and outliers. Applied statistical evaluation metrics like R^2 score and RMSE to compare model performance.
- Extra Trees Regressor outperformed others with a 95% prediction accuracy. Built insightful plots using matplotlib and seaborn to visualize model trends and error distributions.
- Tools: Python, Scikit-learn, Pandas, NumPy, Matplotlib

Splitly – Expense Made Easy *Jun 2024 – Aug 2024*

- Developed an app to split and manage group expenses 80% faster than manual process.
- Used React.js for front-end development and incorporated IndexedDB API to manage offline storage of transactional data. Integrated Web App Manifest for installable PWA features. The app featured dynamic bill entry, individual contribution tracking, and a dashboard for visualizing spending patterns.
- Achieved an 80% reduction in manual tracking efforts through automation and real-time calculations.
- Tools: React.js, Indexed DB API, Web App Manifest, HTML, CSS, JS

Hand Tracking Volume Control *May 2024 – Jun 2024*

- Created a computer vision application to control system volume using hand gestures. Leveraged Mediapipe for hand landmark detection and OpenCV for real-time image capture and processing. Mapped finger distances to volume levels and used Pycaw library to interact with system audio.
- This project demonstrated proficiency in real-time video processing, gesture recognition, and Python-based interaction with hardware-level APIs. Implemented visual feedback overlays and ensured high frame-rate performance.
- Tools: Python, Mediapipe, OpenCV, Pycaw

Hotel Booking Management System *Oct 2023 – Dec 2023*

- Developed a complete web-based hotel booking platform including admin and user dashboards.
- Used PHP for backend development and MySQL for relational database management. Integrated AngularJS for dynamic content rendering and responsive UI.
- Features included booking confirmation, payment records, room availability calendar, and CRUD operations for administrators. Emphasized secure data handling and SQL query optimization for real-time access.
- Tools: PHP, MySQL, PhpMyAdmin, AngularJS, HTML, CSS

Encryption in Image *(Cybersecurity Intern Project)*

- Implemented image steganography using MD5 hashing for secure transmission.
- This project was developed during an internship with IBM, focusing on data privacy, encryption techniques, and image manipulation. It demonstrated application of cybersecurity principles in protecting sensitive information during digital transmission.

PUBLICATIONS

- **"Air Quality Index Prediction: A Multi-Model Regression Approach**," *International Journal of Research and Applications in Science, Engineering, and Technology (IJRASET)*, [December, 2024].

ACCOMPLISHMENTS

- **Co-Founder– Beyond Tech Club @JNNCE** Nov 2023 – July 2025
  Organized bootcamps and hackathons; mentored juniors in AI, Web, Cloud & Cybersecurity.

Sports:

- VTU Interzone Handball: Runners-up (2023, 2024), Champions (2025)
- VTU Interzone Throwball: Runners-up (2023), Champions (2024)