CAREER OBJECTIVE

Aspiring **Software Engineer** with project-based and internship experience in **machine learning**, and **full-stack development**. Eager to learn and contribute to building intelligent, scalable, and impactful software solutions.

WORK EXPERIENCE

ROTEN.X | Al Intern Feb '25 – Present

- Developing an AI-driven prosthetic hand using EMG sensors to assist individuals with limb disabilities.
- Collected and trained models on EMG sensor data to enhance real-time muscle signal interpretation.
- Prototyped Al-driven hand band enabling communication for non-verbal users through EMG-based gestures.
- Trained AI models on 10,000+ EMG signals, achieving 87% accuracy in real-time muscle classification.

Hindustan Aeronautics Limited (HAL) | Summer Intern

July '24 – July '24

- Developed an offline chatbot application capable of processing uploaded invoice/bill documents and answering user queries from the extracted data.
- Utilized Mistral 7B LLM in an entirely offline environment to comply with strict data security protocols.
- Implemented document parsing, data indexing, and local query-response pipeline for real-time information retrieval.
- Enhanced internal data accessibility without compromising confidentiality.

Qapp.ai | Al Dev - Intern

May'24 – July' 24

- Developed a chatbot capable of understanding and answering questions about any given HTML website.
- Designed a clean, responsive chatbot UI using modern tools, boosting user interaction time by 30% in testing.
- Integrated a Large Language Model (LLM) to enhance chatbot accuracy and context-awareness.

TECHNICAL SKILLS & TOOLS

Languages: PYTHON, C/C++, JAVASCRIPT, HTML, CSS

 $\textbf{Databases and Backend:} \ \mathsf{SQL}, \ \mathsf{MYSQL}, \ \mathsf{SQLITE}, \ \mathsf{REDIS}, \ \mathsf{CELERY}$

Tools: GIT, GITHUB, POSTMAN, LINUX, EXCEL, CANVA

Frameworks and Libraries: FLASK, VUE3, BOOTSTRAP, PANDAS, SCIKIT-LEARN, NUMPY

Core CS Concepts: DATA STRUCTURES AND ALGORITHMS (in C++), MACHINE LEARNING, OS, DBMS

KEY PROJECTS

Quiz Master App (IQManthan) | Vue 3, Flask, SQLite, Redis, Celery, Bootstrap

- Implemented role-based modules for admins and users to create, manage, and attempt quizzes in real time.
- Integrated Redis and Celery for background task management, email notifications, and real-time Google Chat alerts.
- Automated monthly user reports and enabled CSV export functionality for user quiz data.

System Threat Forecasting (Kaggle) | Python, Scikit-learn, Pandas

- Built and trained a supervised learning model to detect system-level infections vs. clean systems.
- Achieved a **62% detection accuracy** in identifying threats from system logs and activity data.
- Used feature engineering and hyperparameter tuning to enhance real-time classification efficiency.
- Ranked in the **top 20% of Kaggle submissions** in the challenge.

Capstone Project - Sales & Stock Optimization | Excel, Python, SQL

- Conducted research on a live company's sales, purchase, and stock data.
- Identified inefficiencies and optimized stock management to increase sales.
- Improved inventory turnover rate by 18% and reduced stock wastage by 25%, directly impacting revenue growth.

E-Library Management Application (Akshardham) | Python, Flask, SQL

- Built an e-library management system using Python, Flask, and SQL for seamless library operations.
- Implemented a database for efficient storage and retrieval of books and user data.
- Designed a responsive UI for easy browsing, borrowing, and returning of books online.

EDUCATION

Institute Of Technology and Management, Gwalior | B.Tech | 2022–2026 | Artificial Intelligence and Machine Learning | CGPA: 7.83/10 Indian Institute of Technology, Madras | Diploma in Programming | 2022–2025 | Majors: Data Science | CGPA: 7.15/10 Indian Institute of Technology, Madras | Diploma in Data Science | 2022–2025 | Majors: Data Science | CGPA: 8.08/10 St. Mary Orthodox School, Kanpur | Intermediate | Matriculation

EXTRACURRICULAR ACTIVITIES

Management Lead, Google Developer Groups on Campus: Organized events and workshops for Google Developer Groups.

NCC Cadet: Completed rigorous training, demonstrating leadership and discipline.

Academic Excellence: Earned multiple B.Sc course badges for top performance and academic awards in B.Tech course.

Google Cloud Contributor and Google Arcade Contributor: Completed hands-on labs and certifications.

Extra-Curricular Activities: Volunteered at college events (job fair, fest); Relay Race Gold Medalist (Inter-School).