

Gaurav [Last Name]

Aspiring Software Developer | Machine Learning Enthusiast

Education

B.Tech in Information Technology

Vishwakarma Institute of Information Technology, Pune

Expected Graduation: 2027

Skills

Languages: Python, JavaScript, TypeScript, SQL

Frameworks/Libraries: React.js, Node.js, Express.js, Socket.IO, Scikit-learn, XGBoost

Tools: Git, GitHub, Jupyter Notebook, MongoDB, Google Sheets App Script, VS Code

Concepts: Machine Learning, Data Analysis, Real-Time Communication, REST APIs

Projects

Real-Time Chat Application

Tech Stack: Node.js, Express.js, Socket.IO, React.js, MongoDB

- Developed a scalable web-based chat platform supporting real-time communication, private messaging, and file sharing.
- Designed socket-based architecture for seamless instant messaging using Socket.IO.
- Implemented private chat functionality with scoped communication channels.
- Exploring end-to-end encryption and admin control features for enhanced security and moderation.
- Highlights secure communication workflows applicable to messaging systems in defense or enterprise settings.

Loan Default Prediction Using Machine Learning

Tech Stack: Python, Scikit-learn, XGBoost, Pandas, Jupyter

- Built a supervised ML pipeline to predict loan default likelihood using real-world financial data.
- Trained and evaluated models including Random Forest, XGBoost, Decision Tree, and Logistic Regression.
- Engineered features such as Credit Score, Income, Loan Amount, and DTI Ratio to anticipate financial risk.
- Demonstrates AI-driven decision support, transferable to domains like defense logistics or resource allocation.

Climate Change Trend Analysis

Tech Stack: Python, Pandas, Matplotlib, Scikit-learn

- Analyzed climate datasets to uncover long-term environmental trends and regional variation.

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- Applied regression and clustering techniques to model temperature rise, emissions patterns, and geospatial changes.
- Emphasized actionable insights through data visualization and statistical inference.
- Highlights data analytics and predictive modeling capabilities in environmental or strategic contexts.