

# SIDDHARTH BHOPLE

400 Clay Road, Rochester, NY 14623

585-625-8123 | [sid.work0403@gmail.com](mailto:sid.work0403@gmail.com) | [linkedin.com/in/siddharth-bhople/](https://www.linkedin.com/in/siddharth-bhople/) | [github.com/SiD-array](https://github.com/SiD-array)

## Education

### Rochester Institute of Technology

*Masters in Computer Science (Grade : 3.72 / 4.0 )*

**Aug 2024 – Aug 2026**

*Rochester, NY*

### Institute of Engineering and Science, IPS Academy

*Bachelors in Computer Science*

**Dec 2020 - June 2024**

*Indore, India*

## Experience

### Verzeo EduTech

*Machine Learning Intern*

**May 2021 – July 2021**

*Indore, India*

- Achieved **71% accuracy** with ML models employing Naïve Bayes, SVM, and Logistic Regression, outperforming **baseline by 15%**
- Transformed preprocessing pipeline to cut sparse features by **30%** and expedite training with the aid of Python and TensorFlow
- Designed a content-based movie recommendation system that processed **5,000+ movies** and delivered top-5 personalized recommendations in under **1 second/query**.
- Created interactive dashboards to analyze user behavior and feature correlations, cutting manual analysis time by **50%**.

## Projects

### Real-Time Stock Analysis Dashboard | *React (Vite), Recharts, Firebase, FastAPI, ML Libraries*

**July 2025**

- Designed and deployed a full-stack stock analysis web application with interactive multi-timeframe charts, anomaly detection, and predictive modeling.
- Implemented multiple machine learning algorithms (**Linear Regression, Random Forest, XGBoost, LightGBM, CNN**) with technical indicators, improving prediction accuracy as measured by **R<sup>2</sup>, MAE, and MSE**.
- Integrated **Firebase** for persistent watchlist functionality and **News API** for sentiment-based market insights.
- Deployed frontend on **Vercel** and backend on **Railway** with **99.9%** uptime, supporting more than **100 active users**.

### Movie Recommendation System | *Python, Scikit-learn, Pandas, NLTK*

**June 2024**

- Built content-based recommender (CountVectorizer + cosine similarity) on **5K+ movies**.
- Improved similarity accuracy **18%** via improved preprocessing (stemming + feature engineering).
- Launched an interactive web application using **Streamlit**, allowing users to discover similar movies based on content analysis.

### PG Life Web Application | *HTML, CSS, Bootstrap 5, Javascript, AJAX, PHP, MySQL*

**March 2023**

- Pioneered the development of a **full-stack housing platform** that empowered users to explore and bookmark accommodations across numerous cities with user authentication and real-time resource updates
- Accelerated SQL queries → **40% faster** load times, improving property browsing experience
- Executed the deployment of a **fully responsive UI** across desktop and mobile environments, optimizing user interaction by leveraging **Bootstrap** and **CSS Grid**

## Technical Skills

**Languages:** Python, Java, JavaScript (React, Node.js), C/C++, SQL, HTML/CSS, C#/.NET

**Frameworks/Tools:** FastAPI, Streamlit, Vite, Bootstrap, TailwindCSS, Firebase, JavaFX, Git, VS Code

**Data/ML Libraries:** NumPy, Pandas, Scikit-learn, TensorFlow, XGBoost, LightGBM, NLTK, Recharts, TA-Lib

**Databases:** MySQL, PostgreSQL

## Relevant Coursework

- Advanced OOP
- Foundations of Algorithms
- Machine Learning
- Artificial Intelligence
- Computer Science Theory
- Big Data
- Advanced Programming skills (C#/.NET)
- Foundations of Cryptography

## Certifications

Full Stack Web Development with React - Internshala (March, 2023)

Machine Learning With Python - Verzeo EduTech (July, 2021)