

JALPAN VYAS

B.Tech Computer Science and Engineering (2027)

Ahmedabad, Gujarat, India | Open to Remote Internships
GitHub: github.com/Jalpan04 | LinkedIn: [linkedin.com/in/jalpan04](https://www.linkedin.com/in/jalpan04)

Objective

B.Tech CSE student passionate about software engineering, machine learning, and simulations. Looking for a remote internship where I can apply my skills in Python, ML, full-stack development, and algorithms to contribute to real-world projects and grow as a developer.

Technical Skills

Programming	Python, JavaScript, C#, C++
Web Development	MERN (MongoDB, Express, React, Node.js), Flask
Machine Learning	NumPy, Neural Networks (from scratch), MNIST, Flask deployment
Simulation & Algorithms	Fluid Simulation (Navier-Stokes), Pathfinding (A*, Dijkstra)
Tools & Platforms	Git, GitHub, SQLite, Pygame, VS Code

Projects

PixelPredict (Neural Network + Flask App)

Built a custom NumPy neural network for MNIST digit recognition (95–97% accuracy) with a Flask UI for live predictions. Deployed demo for interactive digit recognition.

Fluid Simulator

Implemented a real-time 2D Navier–Stokes fluid simulation (Pygame + NumPy) with adjustable velocity and density parameters.

Maze Solver Visualizer

Created an interactive pathfinding visualizer with BFS, DFS, A*, and Dijkstra algorithms.

Vinylogue (MERN App)

Developed a full-stack MERN album review app with user authentication, REST API, and Spotify API integration.

Identity (C# App)

Built a Windows Forms desktop application for data management and identity storage.

Education

B.Tech in Computer Science and Engineering
Karnavati University, Ahmedabad | Expected Graduation: July 2027