

Tech Stack – YADHU NANDANAN P V

B-TECH CSE STUDENT |  $\mu$ LEARN CETKR EXECOME | AIML ENTHUSIAST | CONTRIBUTING TO A STRONGER DIGITAL INDIA

Date: August 2025

### 1. Development Environment & Coding Tools

- VS Code - Primary code editor with extensions (Prettier, GitLens, Python, Live Server)
- Google Colab - For quick Python and ML experimentation
- Jupyter Notebook - For data analysis and ML workflows
- Replit - Quick collaborative coding/testing
- GitHub - Version control, project hosting
- Git - Version control CLI tool

### 2. Web Frameworks

- HTML5 / CSS3 / JS - Frontend basics
- Bootstrap - Quick and responsive UI design
- Tailwind CSS - Utility-first CSS framework
- React (Learning Phase) - Component-based UI (planned for deeper learning)
- Flask (Beginner) - Lightweight Python web framework

### 3. AI/ML Frameworks

- Scikit-learn - Basic ML models (SVM, KNN, Linear Regression)
- Pandas / NumPy - Data manipulation and analysis
- Matplotlib / Seaborn - Visualization tools
- TensorFlow/Keras (Beginner) - Hands-on with ANN basics

#### 4. Agentic AI Tools

- LangChain (Learning phase) - For chaining LLM agents
- Flowise AI (No-code) - Drag-and-drop agentic flows
- CrewAI (Interested to explore)

#### 5. LLM Platforms

- ChatGPT (GPT-4o) - Daily use for code help, research, prompt writing
- Google Gemini - Multimodal experimentation
- Hugging Face - For trying models/datasets
- OpenRouter.ai - Alternate LLM API hub (explored)

#### 6. AI Tools Frequently Used

- ChatGPT - Coding, project planning, PDF design, research
- Krea.ai / Leonardo.ai - AI-generated images
- Notion AI - Note writing and summarizing
- Grammarly - Grammar checker and writing clarity

#### 7. Cloud Platforms

- GitHub Pages / Vercel - Hosting frontend projects
- Render (Learning) - Flask/Backend app deployment
- Google Drive - Cloud backup and sharing

#### 8. Databases

- MySQL - Academic and project use
- MongoDB (Basics) - NoSQL understanding

- SQLite - Lightweight embedded DB for Python/Flask apps

Note:

All tools listed are either regularly used or used with confidence in projects, learning, and daily workflow.