

Tech Stack Overview – Devanath DR

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Date: August 2025

1. Development Environment & Coding Tools

Tool	Usage Level	Notes
VS Code	Regular Use	Main code editor with Python, React, Flask, etc.
Google Colab	Regular Use	ML experiments, model training with GPU support
Jupyter Notebook	Regular Use	Data analysis and visualization
Git & GitHub	Regular Use	Version control and collaborative coding
Postman	Moderate Use	API testing and debugging

2. Web Frameworks

Framework	Usage Level	Notes
HTML / CSS / JS	Regular Use	Core frontend structure
React.js	Regular Use	For dynamic UIs in personal and project work
Flask	Regular Use	Backend for ML APIs and web integration

3. AI / ML Frameworks

Framework	Usage Level	Notes
PyTorch	Moderate Use	CNNs, transfer learning
YOLOv5	Moderate Use	Real-time object detection projects
OpenCV	Regular Use	Image processing & integration with Flask
TensorFlow/Keras	Basic Use	ANN experiments
Scikit-learn	Regular Use	Classification, pipelines, ML prototyping
Pandas / NumPy	Regular Use	Data wrangling and feature engineering

4. Agentic AI Tools

Tool	Usage Level	Notes
None actively used yet	—	Currently exploring LangChain and CrewAI concepts

5. LLM Platforms

Platform	Usage Level	Notes
ChatGPT (GPT-4o)	Regular Use	Coding, debugging, ideation, planning
Google Gemini Pro	Regular Use	Multimodal use and LLM comparison
Mistral APIs	Moderate Use	Prompt experimentation

DeepSeek / Grok	Basic Use	Testing performance in reasoning tasks
Hugging Face	Basic Use	For models, APIs, and dataset testing

6. AI Tools Frequently Used

Tool	Usage Level	Notes
ChatGPT	Daily Use	Development, research, doc writing
Google Colab	Regular Use	Model training and notebook experiments
Kaggle	Regular Use	ML competitions, dataset exploration

7. Cloud Platforms

Platform	Usage Level	Notes
Render	Regular Use	Flask web app deployment
Hugging Face Spaces	Moderate Use	Hosting small Gradio/ML demo apps
Firebase (Basic)	Basic Use	Used in small-scale web apps

8. Databases

Database	Usage Level	Notes
MongoDB	Regular Use	Integrated with Flask for auth/data
PostgreSQL	Moderate Use	Used for structured, relational DB projects

SQLite	Regular Use	For lightweight Python/Flask apps
Firebase Realtime DB	Basic Use	NoSQL projects for basic apps

All these tools are used in different AI projects and I had experience with, currently learning Agentic ai and update the skillset.