

Vinayak Agrawal

Bangalore, India | +91-9406363487 | vinayakagrawalw@gmail.com | github.com/agrawalvinayak7 | vinxyak.com

SUMMARY

Full-stack developer with experience building AI-powered and machine learning web applications and fintech prototypes end-to-end. Strong in frontend, backend, and AI integration, including model inference workflows, REST APIs, and system design, with a focus on reliability and real-world usability. Enjoys rapid prototyping and iterating experimental models into usable products.

EDUCATION

- BMS College of Engineering, Bangalore** 2021 - 2025
Bachelor of Engineering in Electronics and Communication CGPA: 7.5 / 10.0

EXPERIENCE

- K4 Media & Technologies LLP** May 2025 – July 2025
Web Development Intern (Ed-Tech Startup, Remote)
 - Product Development:** Built and maintained production web applications used for educational content delivery.
 - Full-stack Work:** Worked across frontend components and backend integrations using modern web technologies.
 - Remote Collaboration:** Collaborated with a distributed team, sharing daily progress updates and iterating on feedback.

PROJECTS

- Multimodal Sentiment Analysis Platform**
Machine learning system for multimodal sentiment analysis across video, audio, and text inputs.
 - Multimodal Pipeline:** Designed an end-to-end pipeline combining NLP, computer vision, and audio processing for unified sentiment analysis.
 - Model Integration:** Integrated transformer-based text models, 3D CNNs for video understanding, and custom audio feature extraction.
 - System Orchestration:** Built backend services to orchestrate inference, aggregate results, and improve explainability.
- AI Image Transformer Web App**
 - Generative AI Interface:** Built an interactive image generation web app using a Hugging Face vision model with a Gradio-based interface for rapid experimentation and user interaction.
 - Rapid Prototyping:** Developed and iterated the application in Google Colab, focusing on fast feedback loops, prompt tuning, and usability-driven improvements.

SKILLS

- Programming Languages:** TypeScript, JavaScript, Python, C++
- Frontend & UI:** React, Next.js, Tailwind CSS, Shadcn UI, Framer Motion
- Backend & APIs:** Node.js, Express.js, REST APIs, API development
- AI / ML:** Machine Learning, PyTorch, Hugging Face, model inference, generative AI
- Databases:** PostgreSQL, MongoDB, SQLite, Supabase
- Cloud & DevOps:** AWS (model hosting), Vercel, Git, GitHub