Vanshaj Poonia

Full Stack & AI Developer

New Delhi, India

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Professional Summary

Full Stack and AI Developer with experience building production web applications, AI platforms, developer tools, and machine learning systems. Skilled at taking products from initial requirements through interface design, backend architecture, database integration, testing, deployment, and iteration. Combines strong technical ownership with practical product thinking and clear communication to build reliable software that solves real user and business problems.

Technical Skills

Languages	**Rust, TypeScript, Python, JavaScript, C, C++**
Frontend	**React, Next.js, HTML, CSS, Tailwind CSS, shadcn/ui, Material UI, Framer Motion**
Backend & APIs	**Node.js, Express, Django, REST APIs, authentication, OpenRouter and LLM integrations**
Databases	**PostgreSQL, Neon, Supabase, Firebase, MongoDB, MySQL**
AI & ML	**Neural networks, NumPy, automatic differentiation, model evaluation, prompt routing, AI product development**
Cloud & Tools	**Git, GitHub, Vercel, AWS, Linux command line, QEMU, CI/CD, automated testing**

Education

Indian Institute of Technology Jodhpur *Jodhpur, Rajasthan, India*

Bachelor's in Artificial Intelligence and Data Science

- Coursework and independent work spanning software development, algorithms, computer systems, artificial intelligence, and applied machine learning.

Experience

Kreativ Vantage *kreativvantage.com*

Principal Engineer

- Lead technical delivery for client websites, full stack applications, AI features, and workflow automation from discovery and scoping through launch.
- Build responsive interfaces, backend services, database integrations, authentication flows, and API connections using modern JavaScript and cloud platforms.
- Translate business requirements into maintainable technical solutions while managing deployment, hosting, domains, revisions, and direct client communication.

Hypnosys / Independent Product Work *Remote*

Founder & Full Stack Developer

- Build and ship web applications, AI tools, developer utilities, and interactive products from concept through deployment.
- Work across product design, frontend engineering, backend architecture, databases, integrations, testing, and version controlled release workflows.
- Explore browser code execution, model routing, media processing, and reusable software patterns through complete products.

Research Experience

Thapar Institute of Engineering & Technology *Patiala, Punjab, India*

Undergraduate Researcher | Faculty Mentor: Dr. Ravinder Kumar

- Developing a reproducible study on training time masking for robust classical tabular classification under synthetic missingness shift.
- Comparing clean training, uniform feature masking, and structured block masking with Logistic Regression on Bank Marketing and Online Shoppers Purchasing Intention datasets.
- Designing leakage aware preprocessing with train only fitting, median imputation, missingness indicators, standardization, one hot encoding, and controlled evaluation across clean and masked test conditions.

Selected Projects

ChronoOS *GitHub Repository*

Rust, no_std, x86_64, QEMU, Systems Programming

- Built a small bootable Rust kernel in a no_std environment and generated a boot image that runs directly in QEMU.
- Implemented direct VGA text buffer output and reusable print macros to study memory mapped hardware access, kernel execution, and low level systems development.

TensorTrail *GitHub Repository*

Python, NumPy, Neural Networks, Automatic Differentiation

- Built a neural network framework from scratch with reverse mode automatic differentiation, dynamic computation graphs, broadcasting aware gradients, layers, losses, optimizers, and a training API.
- Added convolution and pooling layers, gradient checking, serialization, graph export, validation, early stopping, checkpoints, and 137 automated tests.