Abhinav **Kuchhal**

Frontend Developer & AI Engineer

Contact

abhinavkuchhal7@gmail.com
+91 7417399438
My Website & Blog
Linkedin Profile
Github Profile

Address

Permanent:
Piyush Kuchhal & Associates
425/1, Basant Vihar
Roorkee, Uttarakhand

Present:
Manipal University
Dahmi Kalan
Jaipur, Rajasthan

Summary

Frontend Engineer specializing in React and modern web technologies. I leverage cutting-edge AI tools to accelerate development and enhance productivity, while continuously expanding into full-stack development. Passionate about building fast, intuitive, and design-forward user experiences.

Work Experience

Present – Nov 2025

Independent Researcher
Stealth Startup · Remote

- Conducted market analysis across 5+ competitor platforms
- Identified feature gaps
- Interviewed 20 prospective users
- Validated core problem statements
- Shaped an MVP roadmap
- Defined 3 key differentiators

Aug 2025 – Jan 2025

Co-Founder
Cupertino Focus · Delhi

- Co-founded a product-focused agency
- Delivered Figma-based designs and interactive prototypes
- Worked with 5+ clients
- Led ideation and UX flows
- Performed early product validation for mobile applications

Projects

Web App

Retro OS
Link

- Built a browser-based operating system
- Simulates 10+ native applications (Calculator, Notepad, etc.)
- Includes a draggable window manager
- Optimized DOM operations
- Maintains 60 FPS performance across devices

Web App

Flappy Bird AI
Link

- Designed a neuro-evolutionary algorithm
- Population size up to 10,000 agents
- AI achieves mastery in less than 15 generations
- Consistently scores 10,000+ points autonomously

Technical Skills

Languages	JavaScript, TypeScript, Python, Java, C, HTML, CSS
Frameworks	React, Next.js, Node.js
Infrastructure	Docker, Kubernetes, PostgreSQL

Publications

Unpublished

Making ViTs Practical
First Author · Manipal University
Efficient Designs and Edge Deployment Strategies
Review paper. Focus: Reducing computational and memory overheads for deploying Vision Transformers (ViTs) on resource-constrained edge devices.
Certificate Link

Education

2023 – 2027

B.Tech in Computer & Communication Engineering
Manipal University Jaipur · CGPA: 7.71

Last updated February 12, 2026