Ritika Jha

Gurugram, India • +91 7827246511 • ritikajha3003@gmail.com • LinkedIn • Portfolio • GitHub

Education

- **B.Tech in Electronics and Communication Engineering** Netaji Subhash University of Technology
  Expected July 2025

Experience

Founding Engineer Motion Engineers, Gurugram
Dec 2024 – Present

- Engineered a generative AI pipeline by curating a 5,000-sample dataset of ad visuals, leading to the successful training of a model that **improved ad creative click-through rates by 15%**.
- Developed a PyTorch (VAE)-based mockup generator that streamlined the design process, **reducing design approval time by 40%**.
- Co-developed and deployed the primary company landing page using React.js, contributing to the initial market presence and capturing early user interest.

Founding Engineer SwiftStats AI, Remote
Jul 2024 – Sep 2024

- Built and launched a dynamic pricing dashboard using MongoDB and Express.js, which integrated real-time inventory and market trends, enabling the business to **increase profit margins by 5%** on key product lines.
- Engineered web crawlers and APIs for real-time product monitoring and **automated price-matching against 25 key competitors**, saving an estimated **15 hours per week** of manual analysis.
- Contributed to CI/CD pipeline development and deployment using Docker, ensuring **99.9% uptime** during the critical product launch phase.

Full Stack Intern Ripe and Raw Organics, Remote
Mar 2024 – Jun 2024

- Developed a full-featured, responsive e-commerce platform using the MERN stack, supporting a catalog of over **500 products** and handling high traffic of up to **1,000 daily transactions**.
- Designed and implemented RESTful APIs and optimized MongoDB queries, achieving an average **API response time of under 150ms** under load.

Projects

- **Freelance Web & Automation Projects**
  - Developed scalable web applications and e-commerce platforms for small businesses as a freelance engineer, utilizing the MERN stack.
  - Designed and deployed custom n8n automation workflows to streamline client business processes, integrating with various third-party APIs.
- **Instagram Content Automation**
  - Architected and built a zero-touch automation workflow using n8n that auto-generates and publishes Instagram posts.
  - Integrated OpenAI's API for intelligent caption generation and the Meta Graph API for direct publishing, **eliminating over 5 hours of manual content management per week**.
- **Humanoid Walk Simulation**
  - Developed walking agents in a MuJoCo physics environment using Deep Reinforcement Learning (DRL) algorithms, demonstrating advanced skills in modern AI simulation techniques.
- **Flashcards Learning App**
  - Designed and implemented a personalized learning application with a normalized PostgreSQL schema, utilizing foreign keys and indexing to optimize data retrieval for custom study sessions.

Technical Skills

- **Languages:** JavaScript (ES6+), Python, C++, HTML5/CSS3, SQL
- **Frameworks/Libraries:** React.js, Node.js, Express.js, PyTorch, n8n
- **Databases:** MongoDB, PostgreSQL
- **DevOps & Cloud:** Docker, Git, Vercel, CI/CD, AWS
- **Soft Skills:** Public Speaking, Team Collaboration, Agile Methodologies, Problem Solving