Prithwijit Ghosh

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Innovative Software Engineer and AI Specialist with a proven track record in developing cutting-edge applications. Proficient in JavaScript frameworks (Node.js, Next.js), Python, and machine learning algorithms, with expertise in designing and implementing scalable solutions to complex technical challenges. Demonstrated leadership in driving AI-powered projects, resulting in significant improvements in user engagement and performance. Committed to continuous learning and staying at the forefront of emerging technologies, adept at translating innovative ideas into robust, user-centric applications that deliver tangible business value.

EDUCATION

Techno India University   Kolkata, WB
Bachelor of Technology in Computer Science with AI   *Aug. 2021 – 2025*

PROJECTS

NextRead | *React, Node.js, MongoDB, AWS, Git*   September 2024 – Present
- Developed a full-stack web application for book enthusiasts to track their reading and discover new books
- Implemented an AI-powered recommendation system, increasing user engagement by 40%
- Integrated with external book databases to provide comprehensive book information and cover art
- Created a real-time chat system for book discussions, resulting in a 25% increase in user interaction

Luna | *Image Processing, Machine Learning, Python, CUDA, Git*   August 2024
- Developed an innovative image enhancement system for Permanently Shadowed Regions (PSR) of lunar craters using Chandrayaan-2 OHRC data
- Implemented advanced noise reduction algorithms, improving Signal-to-Noise Ratio (SNR) by 60% in extremely low-light conditions
- Created the first comprehensive PSR image map of lunar poles, significantly aiding landing site selection and geomorphological research
- Optimized image processing pipelines using CUDA, achieving a 4x speedup in data processing times

Epiphany | *Next.js, Nuxt.js, Go, Clerk, and Convex*   June 2024 – Present
- Engineered an AI-powered academic dashboard to streamline student academic management
- Implemented machine learning algorithms to provide personalized study recommendations, improving student performance by 15%
- Designed a robust database schema to efficiently store and retrieve student academic data
- Integrated an AI chatbot to answer student queries, reducing administrative workload by 30%

Meetopia | *Next.js 14, Stream, and Tailwind CSS*   June 2024 – Present
- Developed a video conferencing app using Next.js 14, Stream, and Tailwind CSS for high-quality, low-latency calls.
- Integrated Clerk Authentication to ensure enterprise-level security and user management.
- Designed a Customizable UI with Tailwind CSS, allowing seamless brand alignment.

HONORS & AWARDS

AI Unite Hackathon - Winners   Kolkata, West Bengal
Team: The Last of Us | Project: "Epiphany" - AI-powered academic dashboard   *June 2024*

Smart India Hackathon - Runner-Up   Kolkata, West Bengal
Team: quantumFrost | Project: "Myrtle" - Image Recognition Model using AI/ML Techniques   *October 2023*

TECHNICAL SKILLS

Languages: Java, C, C++, Python, SQL, HTML/CSS, Go
Frameworks: React, Next.js, YOLO
Developer Tools: Git, Docker, Google Cloud Platform, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse
Libraries: pandas, NumPy, Matplotlib