# Prithwijit Ghosh

**J** +91 70291 20540 | ■ Email | ■ LinkedIn | ♠ GitHub | ♠ Portfolio

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
- $\bullet$  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
- $\bullet$  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. is 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