

Shubhodip Pal

Full Stack Developer

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Professional Summary

A results-driven Software Development Engineer with full-stack expertise in Java, Spring Boot, React, and RESTful APIs. Proven ability to design, build, and deploy scalable web applications and backend systems with a strong focus on clean, maintainable code and performance optimization. Skilled in system architecture, and data structures and algorithms. An excellent communicator and collaborative team player, thriving in fast-paced, agile development environments, consistently focused on developer productivity and delivering real-world impact through robust, high-quality solutions.

Key Achievements

- **IEEE Conference Publication** – Published research titled “Optimized Convolutional Neural Network-Based Bengali Speech Emotion Classifier” in *IEEE INDICON 2024*. [\[DOI Link\]](#)

Projects

ExamSpace – Online Assessment Platform

[GitHub](#) [Live Site](#)

- Built a secure, scalable online exam system with Java 21, Spring Boot, React, and MariaDB, deployed via Docker and Cloudflare pages.
- Implemented JWT and OTP authentication, anti-cheating (fullscreen, screen switch detection), and AI-powered question generation (Cohere API, Tesseract OCR).
- Designed and implemented modular REST APIs for user login, authentication, exam creation and participation, and analytics management; optimized backend performance by integrating Caffeine and browser caching.
- Automated CI/CD with GitHub Actions and Cloudflare Tunnel for secure deployment.

NutriSift – AI-Powered Recipe Management Platform

[GitHub](#) [Live Site](#)

- Developed an AI-driven recipe generation and management platform using Spring Boot, React, and MariaDB.
- Built Cohere-powered ingredient-based recipe generation, advanced filtering (diet, calories, cuisine), and a personalized 7-day meal planner.
- Engineered secure JWT authentication, cloud-synced grocery lists, and external API integrations (Pixabay for images, OpenStreetMap for restaurants).
- Designed modular REST APIs and robust database schema for user profiles, recipes, meal plans, and grocery management.

Technical Skills

Languages: Java, JavaScript, Python

Frameworks: Spring Boot, React

Databases: MariaDB, MySQL

Tools: Git, GitHub, VS Code, Docker, Maven, GitHub Actions

Concepts: RESTful APIs, OOP, JWT, CI/CD, Agile

Education

B.Tech in Computer Science and Technology

Aug 2022 – July 2026 (Pursuing)

University of Engineering & Management, Kolkata

YGPA: 8.17 (Till 6th Sem)

Higher Secondary (WBCHSE)

Jun 2022

Baranagore Ramakrishna Mission, Kolkata

Percentage: 78.8%

Secondary (WBBSE)

Mar 2020

Baranagore Ramakrishna Mission, Kolkata

Percentage: 86%

Certifications

- Alpha (DSA with Java) – Apna College
- Delta (Full Stack Web Development) – Apna College
- Data Structures & Backend with Java – Board Infinity (Coursera)
- AWS Fundamentals – Amazon Web Services (Coursera)