Abrar Mahmud Hasan

SOFTWARE ENGINEER & FOUNDER

1+	15+	5	1,200+
YEARS EXPERIENCE	PROJECTS BUILT	AWARDS WON	USERS REACHED

EXPERIENCE

Founder
2026 – Present

Kidsdemy

- Built and shipped a Bengali-native learning platform for Grade 3–5 students using Next.js, TypeScript, PostgreSQL, Redis, Cloudflare, and Railway.
- Implemented device-limited sessions, subscription functionality, promo codes, and an administrative panel.
- Developed an NCTB-aligned mathematics curriculum using reusable lesson components, with automated tests that recompute quiz answers.
- Conducted pre-launch market testing and defined the pricing model.

Product Builder
Part-time

Doodlepad

- Redesigned children's practice screens into a minimal, one-action-per-screen interaction flow.
- Reduced perceived waiting in the voice-guided question player by prefetching the next question's audio.
- Built a Gemini-powered storybook generation pipeline that produces level-appropriate stories, page illustrations, narrated content, and PDF exports.

Software Engineering Intern
Jan 2026 – Apr 2026

Intelsense AI

- Developed frontend features for Unisense AI, the company's flagship product.
- Contributed to the migration from Webpack to Turbopack and integrated Redux and TanStack Query into the application - increasing performace by 3x.

Junior Software Engineer
Dec 2024 – Sep 2025

SECL

- Built full-stack web and ERP solutions, including a supply-chain module that reduced manual data handling by 90%.

PROJECTS

Valerix
Hackathon Win

Built a fault-tolerant microservices system with Order, Inventory, and API Gateway services. Implemented timeout-triggered fallback to asynchronous RabbitMQ messaging during downstream failures and idempotent inventory deductions using an IdempotencyLog table.

HealthX
Hackathon Runner-up

Built an offline-capable telehealth platform using React, Node.js, and Firebase, designed for unreliable network conditions. Implemented hybrid hospital discovery combining live OpenStreetMap queries with a local emergency database, alongside client-side image compression and AI-powered symptom analysis.

Upay Compass
Hackathon Finalist

Built a bilingual (Bangla and English) AI-powered financial companion that turns wallet transactions into actionable insights, including spending breakdowns, budgets, savings goals, and 30-day balance forecasts. Combined LLM-generated explanations with code-based financial calculations and a voice-enabled financial coach.

CONTACT

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RECOGNITION

DevOps & Microservices Hackathon
Champion · BUET CSE Fest 2026

BUP CSE Fest AI Hackathon
1st Runner-up

FutureBuilders Hackathon 2025
1st Runner-up

HackCSB Hackathon 2024
Finalist

Robi 10 Minute School ICT Olympiad
Champion

EXPERTISE

LANGUAGES
Go, Python, Java, TypeScript, C++

BACKEND & APIS
FastAPI, Gin, Django, Spring Boot, Next.js, Node.js, Express

DATABASES & MESSAGING
PostgreSQL, Redis, MongoDB, RabbitMQ

INFRASTRUCTURE & OBSERVABILITY
Docker, Prometheus, Grafana, Cloudflare, Railway, Vercel

FRONTEND
React, Next.js, Redux, Tanstack Query, Tailwind CSS

AI & ML
LangGraph, RAG, LoRA, Gemini API, Ollama, YOLO

EDUCATION

Islamic University of Technology
BSc in Computer Science and Engineering
2023 – 2027