Awesh Islam

Software Engineer

CONTACT

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PROFESSIONAL EXPERIENCE

Software Engineer II | September 2024 - Present

ACS Future School

- Led software development for ACS Future School, Bangladesh's fastest-growing edtech platform, supporting 75,000+ users and 6,000 concurrent participants in live classes.
- Architected the system using a microservice-based architecture deployed on AWS (EC2, RDS, API Gateway, CloudFront), enabling modular scalability, fault tolerance, and efficient resource utilization.
- Designed and managed a PostgreSQL-based data infrastructure, optimizing relational data storage and query performance for high-load educational use cases.
- Built a high-performance WebSocket system to handle concurrent live chat, polls, attendance in classrooms, ensuring real-time interaction and minimal latency.
- Developed secure authentication mechanisms using access/refresh tokens, bcrypt, and Redis for session storage and management.
- Integrated BullMQ for job queuing and background task execution, significantly improving system throughput and stability.
- Implemented push notifications with Firebase Cloud Messaging (FCM)
- Improved platform security and observability through Cloudflare-powered rate limiting and API monitoring.
- Deployed HTTPS servers and load balancing with Caddy, and managed application lifecycle with PM2, ensuring high availability and fault recovery.
- Automated deployments with CI/CD pipelines via GitHub Actions
- Launched Curiosity, an Al-powered chatbot tailored for learners of class 6–10 to deliver personalized and interactive educational experiences.

Backend Developer | August 2024 - September 2024

CoderVai

- Joined an existing codebase and effectively adapted to team workflows, contributing to a collaborative and scalable development environment.
- Designed and implemented a notification system powered by database triggers, enabling real-time alerts for platform events.
- Built a comment system with single-level nesting to facilitate structured student and instructor discussions.
- Developed a comprehensive progress tracking feature for students and admins, enabling insights into learning outcomes and engagement.
- Integrated an SMS delivery system via iSMS API, ensuring timely communication of critical updates to users.
- Integrated an email sending service using SendGrid, supporting both transactional and marketing communications.

Software Development Intern | June 2023 - August 2023

Bindulogic

- Completed a hands-on internship where I gained foundational knowledge in web development and developed proficiency in the PERN stack with TypeScript.
- Built several internal projects as learning exercises, applying core backend principles and improving practical coding skills.
- Learned to manage codebases using GitHub, practiced branching strategies, and collaborated efficiently with team members in a professional development workflow.
- Strengthened understanding of API development, database integration, and teamdriven feature delivery in a real-world setting.

EDUCATION

Bangladesh University Of Engineering & Technology | 2021-

Bachelors of Science in Computer Science Engineering

- CGPA: 3.49
- Completed OS, Compiler, DSA-I, DSA-II, Database courses

Notre dame College | 2018-2020

HSC

- GPA: 5.00
- Ranked 45

ACHIEVEMENTS

BUET INTER UNIVERSITY HACKATHON

RUNNERS UP - 2024

INTER SCHOOL COLLEGE PROGRAMMING COMPETITION

Champion - 2020, 10th - 2019

BUET INTER UNIVERSITY GAMEJAM

Top 10 - 2022

EXCELLENCE AWARD

ACS FUTURE SCHOOL TECH

SKILLS

Languages

JavaScript, TypeScript, C, C++, Python, Bash, Java, Assembly

Tools & DevOps

Git, GitHub Actions, Docker, PM2, Caddy, Cloudflare, SendGrid, iSMS, Firebase Cloud Messaging (FCM)

Frameworks & Libraries

Node.js, Express.js, React, BullMQ, Spring Boot

Cloud Platforms & Databases

AWS (EC2, RDS, CloudFront, API Gateway), Firebase, PostgreSQL, Redis, MongoDB

PROJECTS

JACHAI

Launched and currently developing an online exam platform (beta with 100+ users), now integrating AI features for personalized assessments and enhanced user experience.

Stanford Ling Six Test (SLST)

Collaborated with Stanford University students to develop the frontend for The First Digital Ling Six Test, aimed at early detection of hearing impairment and monitoring children's hearing health.