Anish Roy

Summary

Software engineer skilled in C/C++, algorithms, and full-stack development with React, FastAPI, and PostgreSQL. Experienced in CI/CD, WebSockets, and agile workflows.

EDUCATION

Khulna University of Engineering and Technology

B.Sc. in Electronics and Communication Engineering; CGPA: 3.42/4.00

Khulna, Bangladesh Jan. 2020 – Jul. 2025

TECHNICAL SKILLS

Languages: C, C++, Python — Frontend: React, Redux Toolkit — Backend: FastAPI, MongoDB, PostgreSQL — DevOps & Tools: Docker, Git, Github, GitHub Actions (CI/CD), SonarQube

EXPERIENCE

Learnathon 3.0 by Geeky Solutions

Remote

Trainee Participant

December 2024 - May 2025

- Full-Stack Social Media Web App Development: Collaborated in a team of three to Design and develop a fully functional social media web application from scratch using a Python-based stack
- Agile Collaboration & Peer Learning: Contributed in a sprint-based agile environment. Gained hands-on experience with Git, GitHub workflows, and CI/CD deployment pipelines.
- Industry-Focused Skill Development: Strengthened practical skills in RESTful API design, version control, and modular programming. Participated in mentor-led feedback loops and iterative improvement cycles.

Projects

• UConnect – University Community Platform (2025) [GitHub]:

A university-exclusive platform for research collaboration, academic networking, and real-time messaging.

Key Contributions:

- Built secure user authentication and real-time messaging using **JWT** and **WebSockets**.
- Integrated an AI assistant ("AskU") powered by Hugging Face and Google Gemini API.
- o Designed dynamic features: user profiles, friend system, posts, events, and research collaboration.
- $\circ \ \ \mathrm{Modeled} \ \mathbf{20+} \ \mathbf{PostgreSQL} \ \mathbf{database} \ \mathbf{schemas}; \ \mathrm{exposed} \ \mathbf{RESTful} \ \mathbf{APIs} \ \mathrm{with} \ \mathbf{Swagger} \ \mathbf{documentation}.$
- $\circ \ \ {\bf Automated} \ \ {\bf CI-based} \ \ {\bf test} \ \ {\bf coverage} \ \ {\bf and} \ \ {\bf integrated} \ \ {\bf SonarQube} \ \ {\bf to} \ \ {\bf maintain} \ \ {\bf high} \ \ {\bf code} \ \ {\bf quality}.$
- Followed modular backend architecture; managed sprints and issues using GitHub.
- TaskMaster Multithreaded Task Scheduler (2025) [GitHub]:

 $A\ terminal-based\ C++\ app\ simulating\ OS-level\ task\ scheduling\ with\ multithreading.$

Key Contributions:

- $\circ~$ Built a priority-based scheduler using C++14 with threads and mutexes.
- Implemented task pause/resume/kill with real-time CLI status.
- Used modular OOP design, CMake, and added unit tests.

ACHIEVEMENTS

- Trainee, Learnathon 3.0 (2025) Completed 20-week industry-backed full-stack bootcamp
- Competitive Programming Solved 700+ problems on platforms like Codeforces, Atcoder, and Leetcode.
- Vice President, KUET Math Club Led 3+ events, boosted participation by 40%
- Executive Member, KUET Research Society Coordinated 3+ research meetups and workshops