RITUPARNA WARWATKAR

EDUCATION

Indian Institute of Information Technology, Guwahati

Bachelor of Technology, Computer Science and Engineering

Dec 2020 - May 2024 CGPA: 8.21

TECHNICAL SKILLS

Languages: JavaScript/TypeScript, Dart, Java, Python, C **Database**: MongoDB, Redis, SQL, Firebase, Pinecone **Technologies**: NodeJS, Angular, Docker, React, Flutter

Other: AWS, Git, Shell Scripting

EXPERIENCE

Amazon Web Services - EC2

Feb 2025 - Present

Software Dev Engineer

Berlin, Germany

Veritus.ai May 2024 - Sept 2024

Software Development Engineer

Kobe, Japan

Node.js | MongoDB | Redis | React | AWS | Next.js | tRPC | OpenAl | Gemini | Pinecone

- Implemented a comprehensive authentication system, including user signup, waitlist management, login, **OAuth social login**, email verification, and password management.
- Developed and integrated a robust **payment processing** and credit control system using **Stripe**.
- Developed a fully-featured full-stack **admin panel** for managing users and platform content, including features such as waitlist management, user transactions, and user feedback.
- Developed a **feature flag** system to enable or disable features without modifying source code or redeploying, allowing for **controlled feature rollouts** and **targeted user testing**.
- Implemented context caching to optimize AI workflows, **reducing LLM costs** by up to **65%** by reusing cached tokens instead of passing the same input repeatedly.
- Implemented a LaTeX renderer for rendering beautiful mathematical expressions and equations generated by the LLMs.

FIITJEE, Edfora Dec 2023 - April 2024

Software Developer Intern

Delhi, India

Node.js | MongoDB | Redis | Angular | React | Swagger

- Developed a full-stack **dynamic form builder** and response system, enabling institute admins to create and assign custom forms to students, enhancing platform engagement and **eliminating reliance** on third-party services like Google Forms.
- Implemented **device registration and management** for user authentication on the Glorifire Jr. platform, utilizing **fingerprint.js** for the web and **device IDs** for mobile app. tm
- Developed a full-stack "Question Contribution" module, enabling students to contribute **various question types**, including multiple choice, numerical, and matrix match, to the question bank.
- Enhanced student engagement by up to 50% through push notifications, emails, and in-app notifications.

PROJECTS

HealthCare Portal | 🖸 | 🛗

- Best HealthCare Solution, HackVerse NIT Surathkal
- One-Stop Platform for providing better healthcare in a hassle free manner and eliminating stigmas associated with conventional treatment using Machine Learning
- Tech Stack:- NodeJS, FastAPI, MongoDB, React, Scikit-learn.

Eligram-X | 🗘

- A social media application focused on implementing user authentication, authorization and integration with various platforms.
- Implemented 2FA using TOTP along with session management for users to check which devices their account is logged in.
- Admin Panel for managing platform data which insludes users, posts, hate & spam reports etc
- OAuth integration with Discord for users and Telegram for site admins
- Tech Stack: NodeJS, Angular, MongoDB, Redis, Firebase

Multi-tasking Kernel from scratch in C (Ongoing) $\mid \Omega$

- A 32-bit multi-tasking kernel with FAT16 filesystem, leveraging Intel's memory protection mechanisms.
- Memory virtualization, virtual filesystem layer, FAT16 filesystem driver, task/process functionality, keyboard drivers, and memory management.
- An ELF file loader along with a fully functioning 32-bit multi-tasking kernel with a working shell.

CERTIFICATIONS

Google Cloud: Cloud Digital Leader ✓