

KARTIKEYA RANJAN

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EDUCATION

BTech in Information Technology, National Institute of Technology Karnataka, Surathkal Dec 2020 - May 2024
CGPA: 7.81

WORK EXPERIENCE

Software Engineer | National Payments Corporation of India Sep 2024 - Present

- Automated bank onboarding workflows by building a **React/Spring Boot** portal with **Maker-Checker** validation; **eliminated manual email loops** and reduced operational turnaround time by **40%**.
- Spearheaded the migration of the **UPI Portal** handling **650+** Banks/PSPs, from legacy **JSP** pages to a modern **ReactJS** frontend, resulting in a **50%** boost in UI responsiveness.
- Refactored **Spring MVC** controllers into **REST APIs** for **100+** **UPI Portal** APIs, reducing page load times by **35%** and payload size by **50%**, improving long-term maintainability.
- Engineered** the full-stack architecture of **OneClick** (UPI API test executor) to validate **40+** **APIs**; leveraged **multithreading and scheduling** to **accelerate** test execution from **3 mins to 45 secs (75% reduction)**, boosting and system stability by **40%**.

Software Development Intern | Jio Platforms Limited May 2023 - Jul 2023

- Integrated **2.5M** instances into the **Knowledge Graph** by developing **Python gRPC** services for the ingestion of scraped data and existing datasets into **ArangoDB**, while designing new ontology models.
- Designed comprehensive documentation for Knowledge Repository Service using **MkDocs** for **50+** APIs, improving API adoption and standardizing internal API references.

PROJECTS

Wager Wheels - A decentralized gaming platform [\[Website\]](#) [\[GitHub\]](#)

- Built a decentralized gaming platform using **Next.js/Solidity**, delivering provably fair gameplay through **verifiable randomness** via **Chainlink VRF** and the **Fisher-Yates shuffle** algorithm.
- Launched and managed smart contracts on the **Sepolia Testnet** and integrated blockchain interactions via **Alchemy**, increasing transaction reliability and reducing interaction latency.

TECHNICAL SKILLS

Languages	C++, Java, JavaScript, TypeScript, Python, Rust, HTML, CSS, SQL
Frontend Frameworks	React.js, Next.js, TailwindCSS, Bootstrap
Backend Frameworks	NodeJS, Express, Spring Boot
Databases & Tools	Cassandra, PostgreSQL, Redis, Kafka, MongoDB, MySQL, Git, GitHub, Linux

PUBLICATIONS

- A Bidirectional Blockchain Architecture for Supply Chain Management** - 10th International Conference on Electronics, Computing and Communication Technologies (IEEE CONECCT 2024) [\[Link\]](#)

CODING ACHIEVEMENTS

- [LeetCode](#) Contest Rating **1838** with **800+** problems solved and a best global rank of **418/33040**.
- Rated **1391** on [Codeforces](#) and global rank **1897/23766** in Division 2.
- 3 Star Coder on [Codechef](#) with rating of **1743** and global rank **42** in Division 2.