

EDUCATION

- **Indian Institute of Technology, Kanpur** India
Bachelor of Technology in Computer Science; CPI: 9.01 / 10.0 July. 2015 – June. 2019
- **Academic Excellence Award** by IIT Kanpur for the year 2017-18.

WORK EXPERIENCE

- **Unistack**, *Lead Software Engineer, ONDC based startup* Oct'23 - Jan'25
 - **Technical Leadership:** Led the engineering processes for building seller app, shopify adapter and API specs.
 - **Team Leadership:** Managed technical hiring, mentored engineering team, and established code review processes.
 - **ONDC Integration:** Successfully guided the platform through ONDC's rigorous certification process, achieving production-ready status for the retail domain.
 - **Technologies:** Used MERN stack with TypeScript for core product and Keycloak for IAM service.
- **Quadeye India**, *Low Latency Software Developer, HFT* Jun'19 - Jul'23
 - **Core:** Worked on a latency-critical C++ platform facilitating algorithmic trading for strategies around the globe.
 - **Exchange Integration:** Designed and implemented order flow systems for multiple stock exchanges, including support for Good-Till-Expiry orders. Analyzed exchange data and took data-driven decisions.
 - **System Architecture:** Engineered real-time margin monitoring systems with automated risk controls for trading strategies, ensuring adherence to position limits.
 - **Risk Management:** Built trading surveillance systems to detect order spoofing and implemented trade sanity checks to ensure compliance with market regulations.
 - **Miscellaneous:** Developed exchange order ID prediction system and automated options expiry PNL adjustments.
- **Amazon India**, *Software Developer Intern, India-Payments Team* May'18 - Jul'18
 - **Integration Tests:** Delivered a robust unit and integration test suite for the UPI APIs.
 - **Skills:** Microservice architecture, Debugging, Software Testing, CI/CD, JUnit

PROJECTS

- **Java Compiler**, *Course Project, Prof. Subhajit Roy* Jan'18 - Apr'18
 - **Teamwork:** In a group of 3, developed a compiler in Python that translates a subset of Java code to x86 assembly.
 - **Features Implemented:** Objects, method overloading, strings, arrays, block scoping, and basic type checking.
- **HTTP Proxy Server**, *Course Project, Prof. Amey Karkare* Jan'18 - Apr'18
 - **Description:** Built a HTTP proxy server in *Haskell* that could filter access to blacklisted websites.
 - **Concurrent server:** Used multi-threading with MVar semaphores for handling concurrent requests and polling for non-blocking operations.
- **Buffer Vulnerabilities Identifier for C**, *Supervised Project, Prof. Subhajit Roy* May'17 - Jul'17
 - **VSCode extension:** Detect and prevent buffer overflow vulnerabilities in *C* programs through static code analysis.
 - **Implementation:** Built a code analyzer using *pyparser* to generate Abstract Syntax Trees (*AST*) and identify and replace memory-unsafe code patterns.
- **Miscellaneous**, *Personal Works*
 - **Search Engine:** Focused on IIT Kanpur's web domain, indexing academic pages and student profiles using python scrapy web crawler and Elasticsearch technologies. Link - <https://tinyurl.com/yaz7lmr2>
 - **Code.Fun.Do 2017:** Made an application that identifies objects in images and provides relevant Wikipedia information.
 - **Chrome extension:** Automated LinkedIn profile data extraction and integrated with contact discovery APIs for lead generation.

PROGRAMMING SKILLS

- **Languages:** C++, Python, Typescript, Haskell **Technologies:** Node.js, MongoDB, RabbitMQ, MySQL
- **Tools:** Linux, GDB, Git, Vim, AWS, Postman, L^AT_EX

COURSEWORK

Concurrent Programming	Operating Systems	Computer Networks	Compiler Design
Computer Systems Security	Database Systems	Functional Programming	Distributed Systems