

Kunal Chand

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2+ years of developer experience; specialization in Java tech stack; open to Software Engineer roles

EDUCATION

Master of Science in Computer Science and Engineering

University at Buffalo, The State University of New York

Aug 2022 – Dec 2023

Buffalo, New York, USA

Bachelor of Technology in Computer Science and Engineering

Kalinga Institute of Industrial Technology (KIIT University)

Jul 2016 – May 2020

Bhubaneswar, Odisha, India

EXPERIENCE

Research Assistant | Python, CUDA, MPI, Slurm, Shell

University at Buffalo (SUNY)

Feb 2024 – Present

Buffalo, New York, USA

- Analyzing molecular stability by executing simulations; optimizing performance; developing parallel algorithms.

Teaching Assistant | Go, Linux, Mentoring, Communication, Teamwork

University at Buffalo (SUNY)

Aug 2023 – Dec 2023

Buffalo, New York, USA

- Assisted **70+ students** in learning Distributed Systems concepts, and **troubleshooting bugs**.
- Supervised grading & invigilation activities; generated plagiarism reports; resolved doubts.

Associate Software Engineer | Java, Spring, Maven, SQL, Git, Jira

NRI (Nomura Research Institute) FinTech

Aug 2020 – Aug 2022

Kolkata, West Bengal, India

- Developed fintech portal using **Java Spring Framework**, which provides a UI for financial transactions.
- Identified performance bottlenecks by employing monitoring tools, profiling techniques, and load testing.
- Enhanced software quality by using techniques like **code refactoring** and Test Driven Development (TDD).
- Monitored code quality and adherence to project requirements by **conducting 40+ code reviews**.
- Crafted SQL queries utilizing Data Definition Language (DDL) & Data Manipulation Language (DML) scripts.
- Validated software robustness by executing **6,000** unit test cases and **3,000** integration test cases.

PROJECTS

NRIFT Selenium | Java, Selenium, Eclipse

[GitHub Link](#)

- Automated browser using Java Selenium to **streamline the application process** of in-house attendance app.
- Incorporated a **one-click** feature to automate **end-to-end workflow**, cutting manual efforts and **saving 75% time**.

Text Chat App | C/C++, Socket Programming, TCP/IP, Command-Line-Interface (CLI)

[GitHub Link](#)

- Built a centralized client-server model for a text chat app using TCP sockets & C++ for multi-client communication.
- Deployed and tested the application on dedicated hosts, ensuring **cross-platform compatibility** and robustness.
- Provided dual functionality, acting as a UNIX shell accepting commands, simultaneously handling network operations.

Parallel Systems | C/C++, MPI, OpenMP, Slurm, Shell

[GitHub Link](#) | [Demo Link](#)

- Devised an algorithm having distributed and shared memory achieving a **5x speedup** for subset sum computations.
- Introduced a **load balancing** feature that dynamically divides workload between MPI processes & OpenMP threads.

SKILLS

Languages: Java, Python, C, C++, HTML, CSS, SQL, JavaScript, PHP, Go.

Tools & Frameworks: Git, Jira, Maven, Linux, Spring Boot, Selenium, AWS Cloud, Docker, REST API, Postman, Shell, Bash.

Functional Skills: Object Oriented Programming, Pair Programming, Test Driven Development, SDLC, Agile Model.

Miscellaneous: Data Structures, Algorithms, RDBMS, JDBC, TCP/IP, JSP Servlets, J2EE, MPI, OpenMP, Design Patterns.

ACHIEVEMENTS

Blog: Articulated 2+ insightful editorials/blogs/articles ([Brick Wall](#), [Minimum Area Rectangle](#), and [Recursion Guide](#)).

Hackathon: Secured University Rank 6 in Google Hash Code 2019 Team Competition.