

Kunal Chand

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2+ years of developer experience; MS in Computer Science; open to Software Engineer roles

EXPERIENCE

- Research Assistant** | *Python, CUDA, MPI, Slurm, Shell*
University at Buffalo (SUNY)
Feb 2024 – Present
Remote, United States
 - Analyze molecular stability by executing simulations; optimize performance; develop parallel algorithms
 - Enhance computational efficiency by leveraging NVIDIA GPUs with CUDA for high-performance computing
- Teaching Assistant** | *Go, Linux, Communication, Leadership, 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 & proctoring activities; generated plagiarism reports; resolved doubts
- Associate Software Engineer** | *Java, Spring, Oracle DB, JUnit, Git, Jira, Maven*
NRI (Nomura Research Institute) FinTech
Aug 2020 – Aug 2022
Kolkata, West Bengal, India
 - Developed fintech portal using Java Spring, providing a UI for financial transactions, serving 10K users
 - Identified performance bottlenecks by employing monitoring tools, profiling techniques, and load testing
 - Managed a database with 50M+ records by utilizing DDL & DML scripts to craft SQL queries
 - Monitored code quality and adherence to project requirements by conducting 40+ code reviews
 - Validated software reliability by executing hundreds of unit and integration test cases

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
 - Relevant Coursework: Analysis of Algorithm; Data Intensive Computing; Machine Learning; Computer Architecture
- Bachelor of Technology in Computer Science and Engineering**
Kalinga Institute of Industrial Technology (KIIT University)
Jul 2016 – May 2020
Bhubaneswar, Odisha, India

PROJECTS

- NRIFT Selenium** | *Java, Selenium, Eclipse*
Automated browser using Java Selenium to streamline attendance management within an in-house application
Incorporated a one-click feature to automate end-to-end workflow, cutting manual efforts and saving 75% time
[GitHub Link](#)
- Text Chat App** | *C/C++, Socket Programming, TCP/IP, Command-Line-Interface (CLI)*
Built a centralized client-server model for a text chat app using TCP sockets & C++ for multi-client communication
Deployed and tested application on dedicated hosts, ensuring cross-platform compatibility and robustness
Provided dual functionality, acting as a UNIX Shell accepting commands, simultaneously handling network operations
[GitHub Link](#)
- Parallel Systems** | *C/C++, MPI, OpenMP, Slurm, Shell*
Devised an algorithm having distributed and shared memory achieving a 5x speedup for subset sum computations
Introduced a load balancing feature to dynamically delegate workload between MPI processes & OpenMP threads
[Demo Link](#) | [GitHub Link](#)

SKILLS

Languages: Java, Python, C, C++, HTML, CSS, SQL, JavaScript, PHP, Go
Tools & Frameworks: Git, Jira, Maven, Linux, Spring Boot, Selenium, Docker, Kubernetes, AWS Cloud, Postman, Shell, Bash
Functional Skills: Object Oriented Programming, Pair Programming, Test Driven Development, SDLC, Agile, Code Review
Miscellaneous: Data Structures, Algorithms, Design Patterns, PostgreSQL, MongoDB, Microservices, Kafka, REST, CI/CD

ACHIEVEMENTS

Publications: Articulated 2+ editorials/blogs/articles ([Brick Wall](#) | [Minimum Area Rectangle](#) | [Recursion Guide](#))
Certifications: [DevOps Professional Certificate by PagerDuty and LinkedIn](#) | [Hands-On Approach to OOP with Python](#)