Kunal Chand

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2+ years of developer experience; MS in Computer Science; excited for challenging tech roles

EXPERIENCE

Research Assistant | *Python, CUDA, MPI, Slurm, Shell*　　　　　　　　　　　　　　**Feb 2024 – Present**
University at Buffalo (SUNY)　　　　　　　　　　　　　　　　　　　　　　　　　*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*　　　　　　**Aug 2023 – Dec 2023**
University at Buffalo (SUNY)　　　　　　　　　　　　　　　　　　　　　　　　　*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*　　　**Aug 2020 – Aug 2022**
NRI (Nomura Research Institute) FinTech　　　　　　　　　　　　　　　　　*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　　　　　　　　　　　**Aug 2022 – Dec 2023**
University at Buffalo, The State University of New York　　　　　　　　　　　　　*Buffalo, New York, USA*

- Relevant Coursework: Analysis of Algorithm; Data Intensive Computing; Machine Learning; Computer Architecture

Bachelor of Technology in Computer Science and Engineering　　　　　　　　**Jul 2016 – May 2020**
Kalinga Institute of Industrial Technology (KIIT University)　　　　　　　　　*Bhubaneshwar, Odisha, India*

PROJECTS

NRIFT Selenium | *Java, Selenium, Eclipse*　　　　　　　　　　　　　　　　　　　[GitHub Link](#)

- 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

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

- 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

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](#)