# Kunal Chand

+1 (716) 292-5504 | kchand@buffalo.edu | LinkedIn | GitHub | Portfolio

2+ Years of Full Stack Experience | MS in Computer Science | Excited for Software Roles

#### **EXPERIENCE**

 $\textbf{Software Engineer} \mid \textit{React, TypeScript, Material UI, Spring Boot, Kafka}$ 

Dec 2024 - Present

Trulogik

Washington DC-Baltimore Area, USA

- Engineered responsive interfaces using React and TypeScript; optimized API calls and resolved rendering bugs
- Built RESTful APIs using Spring Boot, leveraging Spring Data JPA and Hibernate ORM for seamless database integration
- Designed an Event-Driven Architecture application, implemented Kafka producers and consumers while utilizing Kafka Connect with source and sink connectors for real-time data exchange between external systems and Kafka topics

**Research Assistant** | *Python, CUDA, MPI, Slurm, Shell University at Buffalo (SUNY)* 

Feb 2024 – Feb 2025

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

Associate Software Engineer | Java, Spring, Oracle DB, JUnit, Git, Jira, Maven

Aug 2020 - Aug 2022

Kolkata, West Bengal, India

- NRI (Nomura Research Institute) FinTech
  - 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

## **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 Algorithms; 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

• Relevant Coursework: Data Structures; Computer Networks; Computer Graphics; Operating System

## **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

**PDF Chatbot** | Python, Langchain, HuggingFace, Pinecone, Llama3, Streamlit

GitHub Link

- Engineered a chatbot that responds to user queries related to uploaded PDFs using RAG enhanced LLM, Langchain
- Created Pinecone vector storage with HuggingFace embeddings, optimizing document retrieval & context generation

**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

#### SKILLS

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

Tools & Frameworks: React, Spring Boot, Selenium, Docker, Kubernetes, Linux, AWS Cloud, Postman, Git, Jira, Maven 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 (<u>Brick Wall | Minimum Area Rectangle | Recursion Guide</u>)

Certifications: DevOps Professional Certificate by PagerDuty and LinkedIn | Hands-On Approach to OOP with Python