PAVANKALYAN NAYAK GUGULOTH

+1 (716) 415-0925 | NY, USA (Open to Relocate) | pavankgugulot@gmail.com | linkedin.com/in/gpavanka/

OBJECTIVE

Software Engineer with 3 years of experience in Backend Development, seeking full-time SDE roles.

EDUCATION

Master of Computer Science, University at Buffalo, The State University of New York — August 2023 - August 2024

Relevant Coursework: **Operating Systems, Modern Network Concepts, Computer Security, Into to Machine Learning, Analysis of Algorithms, Data Intensive Computing, Deep Learning, Computer Vision**

Bachelor of Tech. in Electronics and Communications Engineering, NIT Rourkela — July 2016 - June 2020

SKILLS

Programming Languages :	C++, Java, Python, GoLang
Operating Systems:	Windows, Linux
Database & ORM :	RDBMS, MySQL, Oracle, SQL, JDBC, NoSQL, MongoDB, SQL Server, Postgres
Frameworks/APIs/Tools/Cloud:	Spring MVC, REST APIs, gRPC, GraphQL, Django, Kafka, AWS, Postman, Docker, Flask
AI/ ML:	Hadoop, MapReduce, Pandas, Scikit-Learn, NumPy, Pytorch, TensorFlow, PySpark
Project/Version Control/DevOps:	Agile, Scrum, Atlassian Jira, Confluence, Git, CI/CD, Jenkins

EXPERIENCE

Software Developer Intern, Macmillan, USA — Jun 2024 - Aug 2024

- Developed and **automated** a workflow to publish solution articles from **Google Docs** to **Freshdesk** using **AWS S3**, reducing manual processing time by **95%** improving content management workflow.
- Integrated **Google Gemini** model into the product for publishing the Knowledge Based tickets from **Asana** portal to Freshdesk chat Help section using Python and **AI/ML** which **boosted user engagement** by **30%**.
- Led a team of four to deliver an intern project **Future of AI** in the domain of Book Publishing, Implemented a Book Recommender System combining content-based filtering and collaborative filtering to provide recommendations with average number of clicks per user at 73%.

Application Engineer II, Oracle Corp. — May 2022 - Aug 2023

- Worked on complete software development lifecycle (**SDLC**) of Minimum Viable Product (MVP) of HCM Celebrate product right from **requirements gathering, coding, code review, testing, deploying, bug fixing, and code/API documentation**. Tech/Tools - Java, ADF, Oracle,JavaScript, SQL, PLSQL, JUNIT, Linux, OraReview, VBCS, OCI (Oracle Cloud Infrastructure)
- Developed **PLSQL scripts** for distributing reward points to employees on a monthly basis and worked on an **Explicit Locking Mechanism (Oracle) for concurrent updates** of likes and comments by users. Tech: Oracle, DBMS, Transactions
- Implemented Under Budget Restriction functionality for worksheet area in the Workforce Compensation product resulting in **improvement in budget adherence** across client organizations. Tech: Java
- Performed analysis of issues reported by customers **resolving over 95% of cases within targeted minimal time**, enhancing product reliability and customer satisfaction.

Software Engineer, CGI Inc — Sep 2020 - May 2022

- Built a **high-performance, secure, testable, and maintainable RESTful service** with clean, well-documented, and easy-to-use RESTful APIs for the 'Medway' application based on **micro-services architecture** in **Java** using **SpringBoot** framework and **front-end web development** using **React JS**.
- Refactored existing codebase by developing reliable, and maintainable code adhering to **design patterns** and **Object-Oriented Programming principles**, and followed best practices and coding standards.
- Implemented **Kafka** system monitoring and issue resolution, leading to a **90% improvement** in real-time logging and message passing.
- Conducted a POC on R Shiny and designed and implemented dashboards to visualize the collected data, enhancing data-driven decision-making processes.

PROJECTS

- **Fault-Tolerant Distributed Key-Value Store (Raft Consensus):** Designed and implemented a robust, fault-tolerant distributed key-value store in GoLang, inspired by Google Spanner. Utilized the Raft algorithm to achieve consensus across nodes, and implemented optimistic concurrency control (OCC), two-phase locking (2PL), and two-phase commits (2PC) to support transactions. Applied consistent hashing to distribute data evenly across shards. **Tech: Distributed Systems, Go**.
- **Real-Time Chat Application:** Architected and implemented a real-time chat application utilizing advanced socket programming techniques, creating a scalable server-client architecture supporting multiple concurrent connections, and ensuring efficient data transmission and low latency in message delivery. **Tech: C++, Client-Server Model, Network Protocols, Socket programming, TCP/IP Suite**.
- **BrandCollab AI System:** Led a team of 3 at **UBHacks 2023 hackathon** where we designed a system where brands and influencers can collaborate and find the perfect match for their products and influencers can discover opportunities that align with their personal brand. **Tech: Semantic Matching Algorithms, Recommendation System, Java, Python, Flask, Postgres, SpringBoot, ReactJS**.
- **Facial Emotion Recognition:** Developed an advanced emotion detection model using VGG19 for feature extraction, integrated with LSTM and an attention mechanism to enhance accuracy on the FER-2013 dataset, achieving a 66% recognition rate . **Tech: Python, VGG19, LSTM, Attention mechanism, PyTorch**.

ACHIEVEMENTS & LEADERSHIP

- Secured 1st position in Volleyball Tournament in Vriddhi Sports Fest, 2020 while I was Captain in institute team.
- Presented Smart Gardening System project at **International Conference on range Technology** (ICORT 2019).