# PAVANKALYAN NAYAK GUGULOTH

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#### **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

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

Frameworks/APIs/Tools/Cloud: Spring MVC, REST APIs, 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

Interests: Web Applications Development, Distributed Systems, Networks, Automated Systems

#### **EXPERIENCE**

### Software Developer Intern, Macmillan

Jun 2024 - Aug 2024, USA

- Developed and automated a workflow to publish solution articles from Google Docs to Freshdesk, reducing manual processing time by 60% using Python and Django by integrating Freshdesk API and Google Doc API, improving content management by 80%
- 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**%

## 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, 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 Kafka real-time logging and message passing.

### **PROJECTS**

- Real-Time Chat Application: Architected and implemented a real-time chat application utilizing advanced socket programming techniques, enabling seamless, bidirectional communication between users. It involved creation of 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, Attension mechanism, PyTorch.

## **ACHIEVEMENTS**

- 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).