Sushil Nayak

Panaji,Goa
+91-8805184693 | sushil.sapnagroup@gmail.com | linkedin.com/in/sushilthenayak

EDUCATION

Birla Institute of Technology and Science, Pilani (Goa Campus) **2020 – 2024**
*BE Electronics and Communication - **CGPA - 9.78***

TECHNICAL SKILLS

Languages: C++, C, GoLang, Java, PHP, SQL
Technologies/Frameworks: MySQL, MongoDB, Spring Boot, Kafka
Developer Tools: Kafka, S3, SQS, AWS CodePipeline, Docker, Grafana, Postman

INTERNSHIPS

Zomato - Software Development | GoLang, PHP, Database - MySQL, MongoDB **Jan - June 2024**

- Developed and fine-tuned backend systems for Zomato's support infrastructure utilizing Go, MySQL and MongoDB to handle more than 100 rpm, thereby boosting scalability and performance by upto 40%.
- Collaborated on enhancing a versatile chatbot built with PHP, seamlessly integrated it with Zomato's messaging platform to optimize user experience and streamline support processes. Accomplished this within a matter of 3 weeks by independently grasping the system and processes.
- Leveraged AWS services such as SQS and S3 to build resilient and efficient communication channels, ensuring reliable handling of support tickets and messages.

Publicis Sapient - Software Development | Java SpringBoot, Database - MySQL **May - June 2023**

- Played a key role in enhancing the backend systems of the OSB Bank project.
- Implemented CRUD APIs for getting account details using Java SpringBoot. To enhance scalability and reduce latency, implemented Kafka's event driven architecture.
- Had exposure to basic DevOps processes for pipelining and deployment.

UST Global - ML Intern | YOLO, Google Colab **May - July 2022**

- Researched about Machine Learning Models focused on Object Detection and its use cases.
- Built a Dangerous Object Detector(80% mean accuracy) for airport scans using an open source model YOLO . This included training and testing the model using custom datasets.

PROJECTS

Network Protocol Stack Design - Computer Networks | NS2 **2023**

- As one of the co-authors of the research paper, implemented a custom network protocol stack for a cloudlet system to improve the system's vital metrics by more than 50%.
- Compared the metrics of our protocol with existing protocols like CSMA-CD, CSMA-CA, Slotted Aloha.
- Worked with NS2 to simulate our protocol on virtual nodes.

Digital Alarm Clock - Microprocessors and Interfacing | ASM, Proteus **2022**

- Designed a Digital Alarm Clock using the x86 Intel Architecture and related peripherals, while working in a team of 6.
- Used assembly machine code to write the inherent logic and simulated the clock on Proteus.

Electronic Line Judge - Electronics | Raspberry Pi, Python, Piezoelectric Sensors **2021**

- Researched on the feasibility of a sensor based solution for automated line calls in sports upto a 5% accuracy.
- Built a model for the same using a piezoelectric sensor and a Python programmed Raspberry Pi.

COURSEWORK

- Data Structures and Algorithms
- Operating Systems
- OOP Concepts
- Computer Networks
- Digital Design
- Microprocessors and Interfacing
- Database Management and Systems

CERTIFICATIONS

- Postman Classroom Program - Postdot Technologies

EXTRACURRICULARS

- Debating: Participated and won prizes in multiple debates for school and college.
- Badminton: Represented Goa State at National level for badminton. Won multiple tournaments throughout school, Higher Secondary and College.