Suwesh Prasad Sah

🔾 GitHub | Hugging Face | 🛅 LinkedIn | 🕿 Google Scholar | ■ suwesh081@gmail.com | 🤳 +91-8926190630

EDUCATION

National Institute of Technology Rourkela, India

Bachelor of Technology in Computer Science and Engineering

Dec 2020 - Jun 2024GPA: 7.80/10.0

St. Xavier's English High School, Bihar

Intermediate in Science and Maths

Jun 2018 - Sep 2020 Percentage: 81/100

2018

Marigold English Boarding School, Bhaktapur

Matriculation GPA: 3.60/4.0

EXPERIENCE

Hero Housing Finance

Jun 2024 - Present

Graduate Engineer Trainee

Gurugram, Haryana, India

- Designed and deployed an LLM-based Retrieval-Augmented Generation (RAG) pipeline integrating FAQs, user manuals and timestamped video transcripts into an intelligent chatbot within Salesforce Org, improving self-service support and reducing support ticket volume.
- Engineered a custom semantic video retrieval system for the above chatbot, using cosine similarity on timestamped video transcripts (created using Automatic Speech Recognition) to generate dynamic short video links as references, boosting user adoption and learning efficiency.
- Software testing and implementation of test automation workflows for desktop and mobile applications.
- BRD analysis and application change implementation management with product ownership responsibilities.

TVS Motor Company

May 2023 - July 2023

- Data Engineer, Internship Bangalore, Karnataka, India • Designed and developed scalable ETL (Extract, Transform, Load) pipelines on Microsoft Azure using Azure Data Factory, Data Lake, Delta Tables, and Azure SQL Server; integrated data from SAP HANA and SAP client APIs.
 - Automated repetitive manual data engineering tasks by building reusable ETL frameworks in Databricks using Python and PySpark, improving team efficiency and reducing processing time.

Wobblrr IT Services

Jul 2022 - Sep 2022

Delhi, India

• Simulated and developed VLAN blueprints in Cisco Packet Tracer which were later used for on-site implementation.

Research and Projects

Parallel Perception Network

Network Engineer, Internship

2024 - 2024

Research Publication (view paper)

huggingface/PPN

- Designed and implemented Parallel Perception Network (PPN): two independent neural modules (segmentation + reconstruction) executing concurrently on separate accelerators (hardware parallelism) to meet real-time demands of high-speed autonomous racing.
- Ingests raw 3D LiDAR point clouds, projects them to Bird's Eye View, and processes spatial + temporal features in parallel, achieving 2× inference speedup over sequential pipelines.

Multi-core Sentiment Engine

Python, NLP

- ython, NLP
 github/SentimentEngine
 Developed a scalable, rule-based ETL text analysis algorithm with CPU-based multiprocessing to handle multiple text files in parallel across logical cores, significantly reducing text processing time on CPU only systems.
- Extracted web data using requests, parsed HTML with BeautifulSoup, and preprocessed text with NLTK tokenizers to compute sentiment scores including polarity and positivity/negativity.

Parking Forecasting System

2023 - 2023

Python, ML, IoT, Time Series Prediction

github/PFS

- Implemented an IoT-based smart parking system with data collection on the cloud.
- Using sci-kit learn, two models are used to individually predict the probability of slot availability. When compared, the Multi-Layer Perceptron gives slots with more probability of availability compared to the Random Forest Classifier.

TECHNICAL SKILLS

Programming Languages & Frameworks: Python, C/C++, MySQL; PySpark, PyTorch, Transformers

Cloud & DevOps: Microsoft Azure, AWS, CI/CD, Automation

Operating Systems: Windows, Ubuntu, RHEL, MacOS Other Programs: Adobe Lightroom, Adobe Photoshop

Programming Concepts: Data Structures, Algorithms, DBMS, OOPs

Languages: English, Hindi, Nepali, Maithili

CERTIFICATIONS

Research Paper Presenter / 12th IEEE International Conference on Intelligence System and Embedded Design

2024

Relevant Coursework

Computer Science: Deep Learning, Machine Learning, Cloud Computing, Software Engineering, Database Management System, Computer Organization and Architecture, Data Structures and Algorithm, Distributed Systems, Object Oriented Programming, Operating Systems, Computer Networks