# SHUBHAM PANDEY

Uttam nagar, Delhi

## SKILLS SUMMARY

• Languages: Python, Go, JavaScript, JAVA, TypeScript, SQL, Bash

• Frameworks: Flask, FastAPI, Django, NLTK, React, NextJS, NodeJS, OAuth2.0

• Tools: Selenium, Docker, GIT, Gitlab, PostgreSQL, MySQL, MongoDB, FAISS, Jira

• Platforms: GCP, Linux, Web, Microsoft Power Platform

• AI Tools: LangChain, n8n, LangGraph, Ollama

• Soft Skills: Leadership, Event Management, Writing, Public Speaking

#### Experience

## • Ciena Software Engineer 1B

March 2025 - Present

- RA Development in Python: Architected an end-to-end Resource Adapter integrating CLI-based device communication with Ciena BluePlanet Orchestrate, streamlining resource provisioning through scalable OOP design. Accelerated development by 30% using AI-assisted tools while maintaining comprehensive unit test coverage.
- Logical Inventory Modelling: Implemented logical inventory with FREs to map physical and logical TPEs, extending orchestration capabilities for complex network topology management through precise modelling and OOP design.
- o Cache Clearing Implementation: Implemented Cache clearing mechanism for Full reSync of Resources in the RA

## • Hughes Systique (HUGHES group) Associate Engineer

July 2023 - Present

- ML Document Pipeline: Engineered automated processing system using Power Automate and Python, extracting 10,000+ monthly vendor documents with 95% accuracy, reducing processing time from 4 hours to 30 minutes
- Data Architecture Design: Architected serverless pipeline using GCP Cloud Run and BigQuery, processing 100+vendors' records and fault data daily, enabling real-time analytics
- SSO Access Control: Implemented OKTA SSO authentication using OAuth 2.0 for DMS, securing vendor document access and processing for external partners with zero security incidents
- AI Assistant: Developed full-stack AI assistant using NextJS and FastAPI, driving 50%+ adoption across 1000+ employees with a data-driven dashboard for usage analytics and continuous feature deployment
- Backend Infrastructure: Architected high-performance FastAPI backend with robust exception handling, reducing response time by 50%, utilizing MySQL and Weaviate, and containerizing with Docker for scalable deployment.
- Langchain Framework: Engineered custom functionality by overriding framework entity classes, implementing an advanced Reranker Model for document embeddings that significantly enhanced search accuracy by 80%.
- Testing & Deployment: Prepared comprehensive test strategy for LLM-powered chatbot, leveraging GPT-4 to automate 80% of manual testing

## Projects

- TimeScope (Time Tracking, System Monitoring, Desktop App) (2025): Github | Demo
  - Overview: TimeScope is a comprehensive time and system tracking application that monitors user activity by tracking open applications, browser usage, and website visits along with time spent on each.
  - Dashboards: Features dual dashboards—one for users to log into projects and track time, and another for administrators to manage projects, assign or remove employees, and monitor team productivity.
  - o Tech: FastAPI, tkinter, AppKit, SQLAlchemy, SQLite, OAuth2.0, pytest
- SheetChat (NLP, Prompt Engineering, LLM, Web Development)(2024): Github | Demo
  - Natural Language Analytics: Engineered a Gemini-powered application enabling natural language interaction with Excel data, streamlining complex operations and data visualization tasks increasing accuracy by over 50%
  - Features: Leveraged LLM to convert natural language into SQL queries, process data, and generate insights, boosting analysis efficiency; deployed using Docker on GCP App Engine.
  - o Tech: Python, TypeScript, Streamlit, Docker, NodeJS, MySQL, Pandas, Matplotlib, GCP
- ChatMood (NLP, Sentiment Analysis, Statistics) (2023): Github
  - Chat Analysis Engine: Built Python-based WhatsApp analyzer processing 10K+ chat messages at a time, implementing custom NLTK-powered sentiment detection for Hinglish text with 85% accuracy
  - Visualisation: Created an Interactive analytics dashboard with Streamlit to visualize chat metrics, user sentiment patterns, and engagement trends from group and individual chats.
  - o Tech: Python, Streamlit, NLTK, Docker

#### EDUCATION

## Jawaharlal Nehru University (QS World Rank 580 (2025))

New Delhi, India

Master of Computer Application; GPA: 8.42

July 2021 - June 2023

University of Delhi

New Delhi, India

Bachelors (Honors) Computer Science; GPA: 8.47

July 2018 - June 2021

Courses: Operating Systems, Data Structures, Analysis Of Algorithms, Artificial Intelligence, Machine Learning, Networking, Databases

### AWARDS AND ACHIEVEMENTS

- Ranked in top 16% on LeetCode (Contest Rating: 1600+)
- Received 2 Instant Awards and a Letter of Recommendation from Project Manager (2024)
- Best Presentation Award at Tech Day (2024)
- Course Certificates: Golang | Docker | Machine Learning

# VOLUNTEER EXPERIENCE

## Volunteer at Kritansh: The School of Hope

New Delhi, India

Teach underprivileged children, participate in donation drives, and lead awareness workshops. April 2023 - Present

Placement Coordinator at JNU

JNU, New Delhi

Coordinated with HR, facilitated student interviews, and managed placement records. April 2022 - December 2022