

TANISHQ TYAGI

Software Engineer

☎ 9837885503 ✉ mailtoofanishqtyagi@gmail.com [in tanishq-tyagi](https://www.linkedin.com/in/tanishq-tyagi) [git-tanishq-tyagi](https://github.com/git-tanishq-tyagi)

Education

Vellore Institute Of Technology

Bachelor of Technology in Information Technology

2020 – 2024

C.G.P.A. 9.19

Experience

VISA

Data Engineer

April 2025 – Present

Bangalore, Karnataka

- Improved Named Entity Recognition (NER) model performance by **30%** in precision, recall, and F1-score by refining training strategies and automating evaluation workflows, saving 2-3 hours per experiment.
- Optimized large-scale Hadoop and PySpark ETL pipelines on multi-petabyte analytical clusters, accelerating distributed NER-based PII scans by **40%** through partition tuning and Spark performance optimizations.
- Leveraged GPU-backed infrastructure to execute full-scale NER inference across **10%** of the entire VISA dataset for test, reducing processing latency by **35%** while maintaining strong precision and recall.
- Engineered a scalable backend data service integrating multiple external systems over secured SSL/TLS, reliably retrieving and processing **billions of records** using streaming and batching strategies, improving throughput by **50%**.

Societe Generale

Software Engineer

February 2024 – April 2025

Bangalore, Karnataka

- Automated XPath-driven XML workflows, reducing manual effort by **90%** and saving 3 hours daily while improving operational efficiency.
- Designed and developed high-performance RESTful APIs using Spring Boot, JPA, and PostgreSQL, and integrated OAuth2 authentication supporting 2,000+ users, enhancing system security by **47%**.
- Led zero-downtime production deployments in an Agile environment, achieving **98%** system uptime while delivering secure and scalable backend solutions.

Projects

ClearVote | React, Web3.js, Arcana

February 2023

- Developed a secure smart contract in Solidity to ensure a **100%** tamper-proof voting process.
- Integrated the smart contract with a website using Web3.js, facilitating smooth interaction.
- Utilized Arcana for authentication, supporting **6** social login providers to enhance accessibility and streamline the login process.

Atlas | Kotlin

December 2022

- Achieved **1,000+** downloads by 2025, assisting students with **100+** curated resources and university insights.
- Developed using MVVM architecture in Kotlin, reducing code redundancy by **50%** and improving maintainability.
- Integrated **Retrofit** for handling **10+** API endpoints, and enhanced UI design with Lottie animations and Chip Navigation elements for a seamless user experience.

AWARDS

- Aspiring Innovator Award @Societe Generale:** Recognized for delivering **30%** more effective solutions by directly understanding user requirements, ensuring **100%** on-time deliverables, and contributing to multiple projects from day 1.
- Bounties @Scaling Ethereum, ETH Global:** Won bounties in Polybase and Scroll Network for Donate4Change.
- Bounties @EthForAll, Devfolio:** Won bounty in Arcana Network for ClearVote.

Technical Skills

Languages: Java, Python, SQL, C++, Kotlin, Solidity

Backend & APIs Spring Boot, JPA/Hibernate, REST, Microservices, OAuth2, SSL/TLS

Big Data: Apache Hadoop, Apache Spark (PySpark), Apache Hive, Batch & Stream Processing

Databases: PostgreSQL, PolyBase

DevOps: Jenkins, CI/CD, Docker, Kubernetes, Git

ML/NLP: NER, Model Evaluation (Precision/Recall/F1), GPU Inference

Core CS: Data Structures, Algorithms, OS, OOPS, Unit Testing