

Nam-Khanh Luong

Data Engineer | Hanoi, Vietnam | khanh.ln692@gmail.com | 0385 071 828

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Overview

A Data Engineer with nearly two years of experience in Data Warehousing, Big Data infrastructure, and Data Analytics. Strong problem-solving skills with a focus on building efficient data pipelines. Currently working towards becoming a Mid/Senior Data Engineer.

Education

Hanoi University of Science and Technology, BS in Information Technology Oct 2020 – Sep 2024

- GPA: 3.54/4.0

Experience

Data Engineer, Viettel Software Service Oct 2023 – Present

IP TRACKING SYSTEM, Metfone (Cambodia)

- Responsible for deploying a 30-node data lake infrastructure, integrating key services such as Hadoop, YARN, Ambari, Hive, Presto, NiFi, Kafka, Spark, HBase, Zookeeper. The Hadoop and YARN clusters are configured for high availability (HA) with NameNode and Resource Manager redundancy. The data lake consists of 19 data nodes, providing a total storage capacity of up to 2 petabytes.
- Designed and implemented 10 ETL pipelines to ingest data from six major sources (16 sub-sources), primarily telecom logs from an FTP server cluster. Data is processed through Apache NiFi, ingested into HDFS, and streamed to six Kafka topics, handling approximately 10TB of data daily.
- Developed a file reconciliation mechanism between ETL stages using Apache Spark, storing validated data in Hive with daily partitions to ensure data integrity and traceability.

NPMS-NCMS, Unitel (Laos)

- Responsible for deploying a data lake, integrating Hadoop, YARN, Ambari, Hive, Presto, NiFi, Kafka, Spark, Zookeeper, and Tableau Server. Configured Hadoop and YARN for high availability (HA) with redundant NameNodes and Resource Managers. The data lake has a storage capacity of 250 terabytes.

Data Engineer Cum Data Digital Transformation Lead, Viettel Software Service Oct 2023 – Present

Led VTIT's data transformation, achieving a 2.33/5 rating in Viettel Group's digital maturity assessment within the first year.

- Established key data governance standards for Metadata, Master Data, Reference Data, Critical Data Elements (CDE), Data Quality, Data Security, Data Management, Data Storage & Operations, and Backup & Recovery.
- Designed and implemented a data warehouse, integrating data from JIRA, CRM, HRM, and Excel files, with ETL pipelines in Python, scheduled via Airflow, and stored in MariaDB.
 - Developed BI reports in Power BI and Superset for all nine back-office departments, adding automated email alerts for better data monitoring.
 - Transformed and provided structured data for internal tools used by executives and managers to track operational KPIs. Built Spring Boot APIs to enable seamless data retrieval and integrated Kafka for event-driven data streaming, reducing direct database queries and optimizing system performance.
 - Integrated a Data Hub to establish data lineage tracking, ensuring transparency and traceability across the data ecosystem.

Addition Experience

Data Engineer, Viettel Software Service Oct 2023 – Present

- Contributed to presales for projects including VNA Videowall, Medical Clinic Financial & Operational Management Dashboard (Singapore), Securities Commission, and K&G.
- Conducted R&D on emerging technologies such as RabbitMQ, RapidsDB, Boomi, and SAS Viya to assess their applicability to company projects.
- Provided mentorship to interns, supporting their development in data engineering and related fields.

Technologies

Languages: Python, Scala, SQL

Data Engineer Skills: Data Warehouse, Data Mart, SQL Server, MariaDB, PowerBI, Superset, SSIS, PDI

Big Data Skills: Linux OS, Docker, Kappa, and Lambda Architecture, Data Lake, Data Lakehouse, Hadoop Ecosystem, Zookeeper, Spark, Kafka, Nifi, Presto, Hive, ELK, Ambari, Airflow.

Language: Advanced English, Intermediate German

CERTIFICATIONS

Cole Data Engineer Certificate of Achievement	2023
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Google Data Analytics Professional Certificate	2023
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ACTIVITIES

Volunteer of Information Technology (V.I.T)	Oct 2021 - 2023
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VIT Dance Crew	Oct 2021 - Present
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