# **KOLATHAT VONGVITTAYANONT**

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### **SUMMARY**

Experienced Data Architecture & Engineer specializing in enterprise data modernization and performance optimization. Expert in designing scalable data architectures, implementing advanced data models through dbt, and orchestrating automated workflows via Apache Airflow. Proven track record of successfully migrating legacy systems to modern platforms while maintaining data integrity and enhancing operational efficiency across enterprise environments.

### **WORK EXPERIENCE**

# Data Architecture & Engineer, ThaiBev

Apr 2025 - Present

- Enterprise Digital Transformation: Spearheaded the strategic redesign and implementation
  of mission-critical data architecture solutions, orchestrating comprehensive legacy system
  modernization initiatives that delivered substantial performance improvements and
  operational cost reductions across enterprise-wide infrastructure.
- Advanced Data Modeling & Scalability Engineering: Architected and maintained sophisticated data models leveraging dbt frameworks, establishing enterprise-grade data consistency, reliability, and scalability standards that support multi-terabyte analytical workloads and real-time business intelligence requirements.
- Automated Workflow Optimization: Engineered and deployed complex Apache Airflow DAG implementations, revolutionizing data processing pipeline efficiency through intelligent automation that eliminated 60%+ manual intervention requirements while ensuring zerodowntime operations.
- Strategic Infrastructure Migration Management: Directed large-scale system migration
  projects from legacy platforms to cutting-edge cloud-native data infrastructure, ensuring
  seamless transition with 100% data integrity preservation and uninterrupted business
  continuity across all operational divisions.
- Enterprise ETL/EL Architecture: Designed and implemented robust, high-performance ETL/EL processing frameworks capable of handling enterprise-scale data transformation requirements, supporting real-time analytics and business intelligence across multiple business units.
- Data Governance & Standards: Established comprehensive data governance frameworks and enterprise-wide best practices in collaboration with C-level stakeholders, creating standardized protocols that ensure regulatory compliance and optimize data management efficiency across the organization.

- Enterprise Data Pipeline Architecture: Spearheaded the design and implementation of
  mission-critical data pipelines and sophisticated ETL processes, orchestrating seamless data
  extraction, transformation, and loading across multi-petabyte datasets. Leveraged advanced
  automation frameworks including Apache Airflow, AWS Glue, and Prefect to optimize
  workflow efficiency and reduce processing time by significant margins.
- Cloud Security & Infrastructure: Architected and enforced comprehensive IAM policies across AWS and Google Cloud Platform environments, establishing enterprise-grade security frameworks that safeguard sensitive data assets while enabling scalable access control for cross-functional teams and stakeholders.
- Strategic Data Architecture Design: Led the conceptualization and development of robust data architectures and sophisticated Entity-Relationship Diagrams (ERD), engineering scalable solutions that support enterprise-wide data storage, retrieval, and analytics capabilities for high-volume, mission-critical applications.
- Advanced Big Data Solutions: Deployed and optimized cutting-edge Big Data technologies
  including Apache Spark, Hadoop, Druid, Delta Lake, and Databricks to handle complex
  analytical workloads, while implementing real-time streaming data processing solutions
  using Apache Kafka to support time-sensitive business intelligence requirements.

# Data Analytics, LearnCloud

Sep 2024 - Mar 2025

- Strategic Business Intelligence Leadership: Architected and delivered comprehensive
  analytical dashboards and advanced data visualization solutions for executive-level Business
  Units and Marketing teams, directly influencing strategic decision-making processes and
  driving measurable business performance improvements across multiple organizational
  divisions.
- Advanced Data Visualization & Reporting: Developed and maintained executive-level reporting systems and interactive dashboards that provide real-time business insights, enabling rapid response to market changes and supporting critical business strategy formulation through comprehensive data storytelling and predictive analytics capabilities.

## **Data Science - Internship**

May 2023 - October 2023

- Advanced Predictive Analytics & Financial Modeling: Engineered sophisticated machine
  learning models utilizing cutting-edge algorithms including XGBoost, LSTM neural networks,
  and ARIMA time-series analysis to forecast USD/THB exchange rate fluctuations with high
  accuracy, directly enabling strategic investment decisions and comprehensive risk mitigation
  strategies for financial portfolio management.
- Strategic Financial Risk Management: Developed and deployed robust statistical inference frameworks and predictive modeling solutions that provided critical market intelligence for executive-level investment decisions, significantly enhancing organizational risk assessment capabilities and supporting multi-million dollar financial strategy formulation.
- Business Intelligence Solutions: Architected dynamic, interactive dashboards and comprehensive data visualization platforms using Power BI, delivering executive-grade analytical insights that transformed complex financial data into actionable strategic intelligence for C-suite executives and senior financial analysts.

## **EDUCATION**

### **Bachelor of Science in Statistic & Data Science**

2020 - 2024

King Mongkut's University of Technology Thonburi

- Relevant coursework in statistic and programing for data
- Thesis on "Forecast USD/THB exchange rate".

Debsirin school 2014 - 2020

Major: Science and mathematics

## ADDITIONAL INFORMATION

- Programming Languages & Frameworks: Python, SQL, dbt (data build tool)
- Data Engineering & Pipeline Technologies: Apache Airflow, AWS Glue, Prefect, Apache Kafka
- Cloud Platforms & Infrastructure: Amazon Web Services (AWS), Google Cloud Platform (GCP), IAM Policies & Security Management, Cloud-native Data Architecture
- **Big Data & Analytics Technologies:** Spark, Hadoop, Druid, ClickHouse, Databricks, Real-time Data Processing, Data Warehousing & Data Lakes
- Machine Learning & Statistical Analysis: XGBoost, LSTM Neural Networks, ARIMA, Predictive Modeling, Time Series Forecasting, Statistical Inference & Risk Analysis, Large Language Models (LLM) Integration & Fine-tuning, Natural Language Processing (NLP)
- AI/ML Development & Deployment: Model Training & Optimization, LLM API Integration
- Data Visualization & Business Intelligence: Power BI, Looker, Superset, Interactive Dashboards, Data Storytelling & Executive Reporting, Business Intelligence Solutions
- Database & Data Modeling: Entity-Relationship Diagrams (ERD), Data Architecture Design,
   Data Governance & Best Practices
- Database server: SQL Server, Postgresql, MySQL, Clickhouse, MongoDB
- **Financial Analytics:** Foreign Exchange Rate Forecasting, Investment Decision Support, Financial Risk Management
- Languages: English, Thai (Native)
- Certifications: Apache Airflow, Data Engineer, dbt data model, serverless datalake on aws,
   Spark, R language, aws cloud