# Muhammad Ali Akbar Al - Qahri

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## SUMMARY

A Data Science graduate from Telkom University with strong academic and organizational experience, including a Scopus-indexed journal publication and leadership roles in student associations. Skilled in data analysis, visualization, statistical modeling, and database management, with professional experience as a Data Visualization Intern at Bank Indonesia. Eager to grow a career in data analysis and big data analytics by applying technical and analytical skills in a dynamic work environment.

#### EDUCATION

**Telkom University** 

Aug. 2021 – Feb. 2025

Bachelor's Degree in Data Science

GPA: 3.74 / 4.00

Coursework: Data Science, Data Analytic, Databases, Data Visualization, Data Warehouse

## EXPERIENCE

**Database Engineer** 

Jun 2025 – Aug 2025

Garda Abdi Negara

Free lance

- Developed a comprehensive Streamlit application to automate the conversion of test questions from various raw formats (.txt, .pdf, .docx) into a structured Excel output.
- Integrated Google Gemini AI API to intelligently detect, clean, and format unstructured questions from PDF files.
- Designed a "Universal Converter" with customizable parsing modes tailored to various test types, balancing automation and manual precision.

## **Assistant Practicum Instructor**

Feb 2024 – Jun 2025

Telkom University

Contract

- Assisted and guided over 160 students across four practicum classes, providing support during lab sessions and project work.
- Graded assignments, quizzes, and final projects, and compiled final scores for lecturers.
- Ensured a consistent and supportive learning environment through clear instruction and hands-on supervision.

#### Data Analyst Intern

Jul 2024 - Oct 2024

Bank Indonesia - South Sulawesi Representative Office

Internship

- Delivered key data products to support strategic decision-making, including dashboards, sentiment analysis, and asset mapping.
- Built an interactive cash flow dashboard using Power BI, and analyzed digital transaction trends with Python.
- Enhanced data communication and operational efficiency by visualizing regional economic insights.

## LICENSES & CERTIFICATIONS

## Data Analysis: Fullstack Intensive Bootcamp

Jul 2025

MySkill

Credential ID: 0SXJDBEEGaLK6wYPRSHQ

• Skills: Data Analytics, Python (Programming Language), SQL, Data Visualization, Statistical Data Analysis

## Belajar Dasar Data Science

Jul 2025

Dicoding Indonesia

Credential ID: 6RPNGKRN8Z2M

• Covers foundational concepts in data science including data processing, basic statistics, and Python for data analysis.

## Data Science Fundamental

Jul 2025

MySkill

• Includes data wrangling, exploratory data analysis, and Python programming in the data science context.

#### Introduction to Looker Data Studio

Jul 2025

MySkill

• Introduces Looker Studio for data visualization and business intelligence reporting.

## Time Series Analysis

MySkill

Jul 2025

• Focuses on analyzing time-dependent data using Python and statistical forecasting techniques.

## Administrasi Sistem dan Layanan Infrastruktur TI

Sep 2022

Google Career Certificates (Coursera)

Credential ID: 8FR67RJYDPAZ

• Covers system administration, networking basics, and infrastructure services.

## Dasar-Dasar Dukungan Teknis

Sep 2022

Google Career Certificates (Coursera)

Credential ID: YEZDMVSRHK25

• Covers the fundamentals of IT support and troubleshooting.

## Keamanan IT: Pertahanan terhadap Kejahatan Digital

Sep 2022

Google Career Certificates (Coursera)

Credential ID: UMYF96P898WX

• Focuses on IT security concepts and protection against digital threats.

## Seluk Beluk Jaringan Komputer

Sep 2022

Google Career Certificates (Coursera)

Credential ID: JB9RRKVQWNEH

• Explains networking protocols, hardware, and internet infrastructure.

## Sistem Operasi dan Anda: Menjadi Pengguna yang Berdaya

Sep 2022

Google Career Certificates (Coursera)

Credential ID: ECJ9N9R7S2C9

• Covers operating systems, file systems, and user empowerment through command-line tools.

#### Projects

## Food Security Forecasting Dashboard | Streamlit, Random Forest, Plotly

Jul 2025 - Aug 2025

- Built an advanced ML-powered dashboard for Indonesian food security analysis using Random Forest with 85.1%  $R^2$  accuracy and time series cross-validation.
- Features comprehensive analytics: model performance tracking, feature importance analysis, multi-scenario forecasting (Status Quo, Conservative, Moderate, Optimistic), and provincial risk assessment with geographic visualization.
- Identified poverty rate as the top predictor (31.4% importance) and flagged 29.1% of provinces as high-risk, providing actionable policy recommendations for immediate intervention.
- Delivered executive dashboard with strategic insights, automated report generation, and data export capabilities for government decision support.
- Link: GitHub Repository Food Security Forecasting Dashboard
- Skills: Machine Learning, Predictive Analytics, Time Series Analysis, Risk Assessment, Policy Analytics, Data Visualization

#### Sales Performance Dashboard | Looker Studio

Jun 2025 – Jul 2025

- Developed an interactive sales dashboard for the marketing team using Looker Studio, turning complex transactional data into strategic insights.
- Three-page report includes: (1) Campaign Trend Analysis (Sales, Profit, AOV), (2) Product Analysis (by category and SKU), and (3)  $360^{\circ}$  Customer Profile (customer-level investigation).
- Empowered decision-making from campaign evaluation to product management.
- Link: Sales Dashboard on Looker Studio
- Skills: Data Analysis, Data Analytics, Data Visualization

## Gemini AI Question Converter | Streamlit, Google Gemini API

May 2025 – Jun 2025

- Built a dual-mode Streamlit app to automate question extraction from .txt, .pdf, and .docx files into structured Excel.
- Used Gemini AI for automatic question parsing, with three manual parsing modes tailored for various test formats (TWK, TKP, TIU).
- Features: live preview, universal converter, answer key detection, and multiple export options (.xlsx, .txt, .pdf,
- Link: GitHub Repository Question Converter App
- Skills: Artificial Intelligence (AI), Optimization

- Developed a BI dashboard for a coal mining firm in Jambi to address data fragmentation and manual reporting.
- Integrated real-time production and fuel consumption data using Power BI, improving speed and accuracy of decisions.
- Link: Power BI Dashboard PT Kamalindo
- Skills: Microsoft Power BI, KPI Dashboards, Microsoft Excel, Business Intelligence (BI)

## Stock Minimum Price Classification | XGBoost, SVM

Oct 2024 – Jan 2025

- Developed a machine learning model to classify whether a stock's closing price will exceed a threshold.
- Used Cramér's V for feature selection and trained XGBoost and SVM on 1,023 feature combinations.
- Final model: SVM with RBF kernel showed best performance after hyperparameter tuning.
- Link: GitHub Repository Stocks Classification
- Skills: Data Science, Data Analytics, Machine Learning, Classification, Financial Forecasting

#### SKILLS

Programming Languages: Python, SQL, R

Data Analysis: Data Cleaning, Exploratory Data Analysis (EDA), Statistical Analysis

Data Visualization: Power BI, Looker Studio, Tableau, Matplotlib, Seaborn

Machine Learning: Classification, Regression, Model Evaluation, Feature Selection

Database & Data Warehouse: MySQL, PostgreSQL, Google BigQuery, Data Modeling

Tools & Platforms: Microsoft Excel, Streamlit, Git, Google Cloud Platform (GCP)

Soft Skills: Problem Solving, Communication, Teamwork, Analytical Thinking

#### PATENTS

## Aplikasi Suit Gunting Batu Kertas

Jun 2024

Patent Number: 000639441

View Patent

- This project is a command-line application developed in Python that simulates the classic game of Rock, Paper, Scissors.
- Its core feature is a configurable backend that allows the administrator to preset the user's probability of winning.
- The program is not intended for entertainment but serves as a powerful educational tool.
- It demonstrates how online gambling systems can be manipulated and raises awareness among young students about the deceptive nature of such platforms.

## Honors & Awards

## Best Paper Award

The 8th International Conference on Data Science and Its Applications (ICoDSA 2025)

- Awarded for the paper titled "Classification of Stocks with Potential to Reach Minimum Price Levels on the Indonesian Stock Exchange using Support Vector Machine (SVM) and eXtreme Gradient Boosting (XGBoost)".
- Collaborated with academic advisor Mr. Deni Saepudin from Telkom University.
- The paper highlights predictive modeling in stock classification for educational and research purposes.

#### Top 3 Best Final Project Team

May 2025

Jul 2025

MySkill Data Analysis Fullstack Intensive Bootcamp - Batch 22

- Awarded as one of the top 3 best final project teams among participants of Batch 22.
- Project developed during an intensive 2-week program covering SQL, Python, statistics, and data visualization.
- Demonstrated strong teamwork, analytical thinking, and problem-solving in practical data analysis cases.

## Himpunan Mahasiswa Data Science

Chairman of BPM HimaDS

 $Feb\ 2024-Mar\ 2025$ 

Telkom University

- Served as the principal leader of the Student Representative Board (BPM), guiding the board's strategic direction and upholding its constitutional duties.
- Led the supervision and evaluation of all work programs executed by the Data Science Student Association to ensure alignment with organizational goals and student interests.

## Himpunan Mahasiswa Data Science

 $Jul\ 2023 - Feb\ 2024$ 

Coordinator of Student Resource Development Division

Telkom University

- Oversaw the planning, execution, and evaluation of programs aimed at enhancing students' technical and soft skills within the Data Science study program.
- Fostered a supportive learning environment to help students face academic and professional challenges.