HAFIDH MUHAMMAD AKBAR

+6285747580700 | hafidhmuhammadakbar15@gmail.com | https://linkedin.com/in/hafidh15/ |
https://hafidhmuhammadakbar.github.io
Jakarta, Indonesia

SUMMARY

Data Engineer with experience in ETL development, data pipeline optimization, and data modeling. Strong proficiency in Python, SQL, and database systems, supported by a solid academic background in Informatics. Skilled in building scalable data workflows, data warehousing, and cloud-based solutions to enable accurate analytics and business insights.

WORK EXPERIENCES

Akuntplus Jakarta, Indonesia
Data Engineer - Contract Jun 2025 - Now

- Designed and maintained ETL pipelines using SQL Server, SSIS, and Python to integrate data from multiple sources into centralized data warehouses, ensuring scalable and reliable data flow.
- Developed and optimized SQL queries to improve performance for data extraction, transformation, and reporting.
- Implemented data validation and quality checks, increasing data accuracy and trust for business analytics.
- Created detailed documentation and handover materials to support system maintainability.

Bangkit Academy 2023 Remote
Machine Learning Engineer (Project-Based Experience) – Internship Aug 2023 - Jan 2024

- Built NutriMate, a full-stack nutrition application that calculates calorie needs and generates personalized meal plans using machine learning.
- Built a collaborative filtering–based recommendation system using TensorFlow, Python, and JavaScript, improving personalization accuracy and user relevance.
- Presented the project's technical design and ML approach to industry mentors, receiving recognition for innovation in machine learning–driven personalization.

EDUCATION

Universitas Sebelas Maret Surakarta, Indonesia
Bachelor of Informatics Jul 2021 – Apr 2025
GPA: 3.93/4.0
Thesis: Ultrasound Image Segmentation for Breast Cancer Detection Using Double Half-UNet with Attention Mechanism

CERTIFICATION

TensorFlow Developer Certificate Mar 2024 – Mar 2029
Google for Developer

TensorFlow: Data and Deployment Nov 2023
Coursera

Structuring Machine Learning Projects Nov 2023
Coursera

DeepLearning.AI TensorFlow Developer Oct 2023
Coursera

Machine Learning Specialization Oct 2023
Coursera

Mathematics for Machine Learning and Data Science Sep 2023
Coursera

ORGANIZATION

UKM Penelitian dan Pengabdian Masyarakat (P2M) Surakarta, Indonesia
Member Jan 2025 - Apr 2025

- Participated in research workshops and proposal development activities focused on data and technology.
- Contributed to collaborative projects and knowledge-sharing sessions within the organization.
- Supported mentoring initiatives for junior members to enhance their learning and project readiness.

AWARDS

Best Paper 2025 4th ICERA (International Conference on Electronics Representation and Algorithm) Jun 2025
Achieved the Best Paper Award titled "FMDDU-Net: an Effective and Efficient Deep Learning Method for Automatic Colorectal Polyp Detection"

1st Place of Scientific Paper Competition by CodeFest 001 2025 May 2025
Developed ESGU-Net, a lightweight U-Net variant achieving 92.70% mIoU for colorectal polyp detection.

1st Place of Academic Competition of Data Science 2024 (Scientific Paper Category) Oct 2024
Created Pixel Attention Half-UNet for satellite building detection with 70.9% mIoU.

Finalist of Gemastik XVII 2024 (Data Mining Category) Sep 2024
Achieved a Top 6 national ranking in the Gemastik Data Mining final.

1st Place of 11th Airlangga Ideas Competition 2023 Nov 2023
Designed an Improved Factorized Residual U-Net achieving 90.24% mIoU for medical image segmentation.

1st Winner & Best Paper of Gemastik XVI 2023 (Scientific Paper Category) Sep 2023
Developed AGU-Net, an attention-based U-Net achieving 86.52% mIoU for polyp segmentation.

PUBLICATIONS & CONFERENCES

SEPA-Net: Segmentation Model for Breast Cancer Detection in Ultrasound Imaging Jul 2025
Publisher: IEEE

SEMAR-Net: An Efficient Deep Learning Model for Automatic Colorectal Polyp Detection Jul 2025
Publisher: IEEE

FMDDU-Net: An Effective and Efficient Deep Learning Method for Automatic Colorectal Polyp Detection Jul 2025
Publisher: IEEE

Automated Building Segmentation Using Half-UNet with Multi-Scale Residual Attention and Self-Calibrated Pixel Attention Jul 2025
Publisher: IEEE

SKILLS

Hard Skills: ETL Development, Data Pipeline Design, Data Modeling, SSIS, Java, Machine Learning, Deep Learning, Data Analysis, Database Management, Data Visualization

Soft Skills: Leadership, Communication, Problem Solving, Team Collaboration, Research Writing

Software Skills: Python, TensorFlow, PyTorch, SQL, SQL Server, MySQL, Git, Docker, Tableau

LANGUAGES

Indonesia - Native

English - Advanced (Professional working proficiency)