Amri Rasyidi
amri.geodesy@gmail.com

in Amri Rasyidi amrirasyidi 🌐 arasyidi.netlify.app

Skills and Stack

- **Machine Learning, Deep Learning, MLOps:** PyTorch, YOLOv8, XGBoost, MLFlow, Optuna,
- **Data Science:** VSCode, GeoPandas, Apache-Sedona, polars, ydata-profiling, duckdb, BigQuery SQL, ArcGIS Pro
- **Deployment:** Git, GitHub, DagsHub
- **Relevant coursework:** computer vision (image classification, object detection), spatial analysis, time series forecasting, clustering, classification
- **Languages:** Bahasa Indonesia (Native), English (CEFR Level C1/IELTS 7.5).

Professional Experience

ESRI Indonesia (GIS Software & Services)   Jakarta, Indonesia
Data Scientist   *January 2023 – present*

Esri Indonesia provides GIS solutions and services to various industries in Indonesia, including local and national government, natural resources, utilities, transportation, telecommunications, and commercial.

- **GIS-Based Market Development:** collaborated with solution team to developed a dashboard able to showcase current market presence and potential leads. Handled the data processing pipeline capable of handling 193 million records, reducing manual process time by 72%. Applied a statistical method to classify ~300 top priority leads out of 4000 prospects.
- **PM2.5 Forecasting:** developed a deep learning timeseries forecasting pipeline to forecast the next 48 hours of PM2.5 trends. Designed >80 experiment combinations and used MLflow and Dagshub to monitor the result. Best model achieve RMSE of ~7.14.

Zenius Education (Ed-Tech)   Jakarta, Indonesia
Business Intelligence Analyst   *December 2021 - July 2022*

Zenius is a well-know ed-tech company pioneer focus on increasing thinking capacity and building foundational thinking for junior and senior high school student to help them excel in their school.

- **Workflow management:** structured a system to increase workflow transparency and accountability. Increased the ability to manage and monitor ad hoc and internal tasks/projects from 0 to 16+ tasks/projects weekly.
- **Dashboard:** created 3 dashboards with google data studio for growth, finance, and content teams with over 50 metrics ranged from operational to C-level granularity.

Gojek (Q-commerce and Financial Services)   Jakarta, Indonesia
Junior Risk Data Analyst ⇒ Risk Data Analyst   *April 2019 - December 2021*

GoTo's ecosystem comprises of on-demand transport, e-commerce, food and grocery delivery, logistics and fulfillment, and financial services through the Gojek, Tokopedia and GoTo Financial platforms.

- **Fraud analysis:** analyzed up to 1000 GPS movements daily to determine fraudulent patterns for constructing fraud rules of fourwheels and two-wheels platforms.
- **Rule deployment:** prevented new modus operandi from exploiting a GPS related-loophole in the production apps. Fraudsters abused this loophole for financial gain and reputation hijack. Reduced the number of case significantly from 400 to 10 cases daily, with false positive rate under 1% within a month.
- **Rule enhancement:** analyzed the hypothesis made fraud my team then enhanced the rule by applying a more sophisticated method of fraud identification (relational graph logic) to detect the convoluted device connection/relation. Increased the detection rate by 50%.

Project

- **Book Recommendation System:** built a local web app to give user a book recommendation based on collaborative filtering logic. Also created a simple search engine to ensure users are asking the correct book to be recommended.
- **MIT IDSS Course - Hackaton:** the objective of this problem is to understand which parameters play an important role in swaying passenger feedback towards a positive scale. Created logistic regression, XGBoost, and Deep learning model resulting in accuracy above 92%.
- **JDVF - Tableau Dashboard:** this dashboard provides the government, NGO, and researcher among many other stakeholders a start to make data-driven decisions and policy-making regarding flood mitigation in West Java. [Tableau Public]

Education

MIT IDSS: Data Science and Machine Learning
Remote

An online professional course taught by the MIT faculty
August - November 2022

Topic covered: statistics, unsupervised and supervised learning, hypothesis testing, deep learning, recommendation system, network and graphical model, and predictive analysis.

Institut Teknologi Bandung
Bandung, Indonesia

B.Sc in Geodesy and Geomatics Engineering, GPA 3.21/4.00.
July 2014 - October 2018

Topic covered includes: calculus, statistics, GIS, satellite geodesy, remote sensing, spatial database, cartography.

Leadership/Voluntary Experience

Yayasan Anak Bangsa Bisa (YABB)
Jakarta, Indonesia

Mentor/Instructor - Generasi Gigih
July - December 2021

Yayasan Anak Bangsa Bisa (YABB) is a non-profit organization founded by Gojek, a catalyst that enables resilient change makers to solve pressing challenges and build sustainable communities. Generasi Gigih programme focuses on generating tech-talent by conducting intensive bootcamp to prepare fresh graduates for the tech industry.

- **Designed, created, and lectured:** data analysis lecture materials (Python and SQL for data analysis).
- **Mentorship:** guide and mentor to the participants during their internship. Ensured the participants gained the most during their internship while maintaining the focus of the projects they were working.

Ikatan Mahasiswa Geodesi ITB (IMG-ITB)
Bandung, Indonesia

Chairman of IMG-ITB (Executive Student Council)
August 2017 – March 2018

Ikatan Mahasiswa Geodesi ITB (IMG-ITB) is a profession-based student association.

- **Visioning:** designed a blueprint as the north star metrics of the association. Mainly focus on character and mindset development in a professional manner and making concrete social impact.
- **Executive function:** managed a council consisted of 5 ministries and 15 departments to maintain and develop the student association.