Rezka Leonandya

ML Engineer and Data Scientist with expertise spanning both industry and academia, specializing in the end-to-end lifecycle of data science.
https://rezkaaufar.github.io • https://github.com/rezkaaufar • https://www.linkedin.com/in/aufarleo/ • https://leetcode.com/u/rezka/

INDUSTRY EXPERIENCE

Machine Learning Engineer - Routing & Maps, Gojek, Jakarta, Indonesia   Jun 2022 – Present
- Co-led initiative to eliminate dependency on Google Maps, resulting in millions of USD in savings annually, by significantly enhancing the internal map systems to reach near parity—within just 1-2% of Google Maps in route quality metrics. This was accomplished by developing large-scale production ML models for ETA prediction, leveraging graph structures, raw ping data, and black-box optimization.
- Designed and deployed a production-grade automatic maps error detector to assist human agents in keeping internal maps updated to real-world conditions. This system automated 45% of incoming driver tickets while maintaining over 70% precision by leveraging raw GPS ping data, the map-matching algorithm, and crowd-sourced driver feedback.
- Managed and optimized approximately 200 data production pipelines, processing over 1 million rows of data daily.
- Involved in running rigorous experimentation (e.g. AB & AA Test, switchback, diff-and-diff, etc) to ensure model effectiveness and alignment with key business metrics.

Data Scientist - Search and Ranking, HappyFresh, Jakarta, Indonesia   Feb 2021 – Jun 2022
- Improved conversion rate by approximately 2% and reduced null search results by around 1% by enhancing the search retrieval & ranking system. This was achieved through attribute-based matching, synonym candidate generation models, and next-purchase ranking models.
- Developed machine learning models to predict out-of-stock items in supplier stores, leading to a 3–5% improvement in key inventory metrics across >100 stores in three countries.

Data Scientist - Chatbot, FinAccel, Jakarta, Indonesia   Feb 2020 – Feb 2021
- Developed email autoresponder and chatbot models to support customer service operations, automatically resolving approximately 53% of daily incoming emails and 33% of daily chat inquiries.
- Built a product recommendation system and optimized batch prediction speed by 8× using Approximate Nearest Neighbors (ANN) techniques.

Data Scientist Intern, ZyLAB, Amsterdam, The Netherlands   Jul 2017 – Oct 2017

RESEARCH EXPERIENCE

Kata research group, Kata.ai
- Research Scientist   Sep 2018 – Sep 2019
  - Worked on large language models (LLMs) for Indonesian language

Meta (Facebook) AI and UvA research group, University of Amsterdam - Meta AI Research Paris
- Graduate Research Student   Jan 2018 – Aug 2018
  - Worked on training neural networks to learn to follow instructions from small data, particularly in the subregular language and the language games of SHRDLURN.

EDUCATION

Saarland University, Saarbruecken, Germany
- Ph.D in Computational Linguistics (Withdrawal, Unfinished)

University of Amsterdam, Amsterdam, The Netherlands
- M.Sc in Artificial Intelligence

University of Indonesia, Jakarta, Indonesia
- B.S. in Computer Science

PUBLICATIONS   Check my semantic scholar page

TOOLS   Python, SQL, Docker, Jupyter Notebook, Flyte (workflow orchestration), Merlin (kubernetes for ML deployment), Cookiecutter, PyTorch, Tensorflow, Google Cloud Platform, Java, C#, LLMs.

LANGUAGES   Indonesian (native), English (professional)