

Work Experience

SINAR MITRA SEPADAN FINANCE (Part of Orix Japan and Sinarmas)

Data Scientist

05/22 – Now

- Developed **credit scoring models** in collaboration with cross-functional teams, including BOD members, credit analysts, product manager, data engineer, data scientist, and backend engineer
- **Presented** credit scoring model results to BODs from Japan & Indonesia in English on a monthly basis
- Collaborated with collection team, develop a predictive model to identify high-risk existing customers (**collection models**)
- Utilized **Python** on daily basis for data cleaning, feature engineering, and model creation, and monitored model metrics as requested by users (editor: Jupyterhub, Jupyter Notebook, VS Code)
- Developed local dashboards using **dashboarding python packages** such as **Streamlit** and **Voila** to present results and insights to the internal (Digital Transformation and Business Analyst) team
- Utilized **DataRobot** as an automated machine learning tool when required, **collaborating with a thirdparty** vendor for the implementation & integration of this software
- Developed & maintained dashboard projects in **Metabase**, which provides critical business insights (Target and Actual, Sales Efficiency) to the BODs & Marketing GMs, build with advanced queries
- Developed & maintained credit scoring project's **Docker & FastAPI** frameworks
- Demonstrated proficiency in **Microsoft SQL** & familiarity with **Postgres** for daily database operations

SMART CITY & COMMUNITY INNOVATION CENTER ITB

Data Scientist

08/21 – 05/22

- Conducted gap analysis & developed a **churn prediction model** for Jasa Raharja that classified insurance arrears and predicted whether someone would be late to pay SWDKLLJ. This project involved working with approximately 6.5 million data points & utilizing the **CRISP-DM** methodology
- Provided assistance to a doctoral student on a paper related to anomaly detection and forecasting in IoT smart-farming sensors using the GRU auto-encoder algorithm in **TensorFlow (neural networks)**

Side Projects

Geo-Data Scientist, Travelling Salesman Problem, FMCG company (5 Month, 2023)

- Solve Travelling Salesman Problem to efficiently assign sales visit sequence
- Using Jupyter Notebook, OSRM, Python, Folium, Google Maps
- Analyzing more than 1 million data row with relational database
- Assisting devops team to deploy using docker, portainer, Jenkins
- Assisting web-developer to use git and upload its own repo
- **The challenge is must create a very efficient algorithm**, in the end reach 15s per salesman routing, **nationally took 3 hours only**

Geo-Data Scientist, Unsupervised Learning+Travelling Salesman Problem, Bank company (1 Month, 2023)

- Solve Unsupervised Learning Problems to efficiently regrouping car sales area
- Solve Travelling Salesman Problem to efficiently assign sales visit sequence
- Self-deploy the result using Python, Docker, Folium, **OSRM, Streamlit web-development (as frontend), MongoDB as non-relational database**
- Assisting devops team to install needed software (container)
- The challenge is must be delivered with a short amount of time, **MVP of app solved in 2 weeks (algorithm+front end)**

Data Related Activities

Indosat Ooredoo Camp (Idcamp) Machine Learning (Expert Stage) (Dicoding ML 5) dicoding.id/machinelearningmahir	2021
FGA Digital Talent Scholarship IBM Machine Learning by Ministry of Communication and Information Technology of the Republic of Indonesia (Dicoding ML 1,2,3,4, IBM, Helsinki University course, etc)	2021
AI Planet Data Science (Big Three Accuracy in the final assignment as a datathon) (leaderboard id: alvinrach) aiplanet.com/challenges/74/getting-started-with-data-science-bootcamp-final-assignment74/leaderboard/practice	2021
AI Planet Deep Learning (First Place in the final assignment as a datathon) aiplanet.com/challenges/144/gender-determination-by-morphometry-of-eyes-144/leaderboard/practice	2021

Education

BANDUNG INSTITUTE OF TECHNOLOGY Bioenergy and Chemurgical Engineering (Chemical Engineering) <ul style="list-style-type: none">• Relevant Courseworks : Engineering Statistics (also as Tutor), Chemical Process Computation, Introduction to Information Technology	Bandung, Indonesia 08/15 – 10/19
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Self Projects

Walmart Stock Prediction with ~0.45% MAE error (Forecasting Problem using Neural Network) github.com/alvinrach/25-Time_Series-Stock_Prediction
Car Insurance Sales Prediction (Classification using XGBoost) (3rd accuracy on DPhi bootcamp leaderboard's Notebook) github.com/alvinrach/21-Car-Insurance-Sales-Prediction

Leadership Activity

Bioenergy and Chemurgy Eng. Student Association Head of Professionalism Division	01/17 – 12/17
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