

ALIF WAHYU SYAHNANDA

Data Analyst/Data Scientist

South Jakarta | +62 878 5173 4577 | alifsyahnanda@outlook.com | [LinkedIn](#) | [GitHub](#) | [Portfolio](#)

SUMMARY

Dedicated Energy Engineer with 2 years of experience in a large-scale manufacturing environment (20,000+ employees), specializing in data science and machine learning. Proven leadership in managing teams and driving data-driven sustainability initiatives. Successfully led a major digital transformation project, analyzing 5,000+ data points/month, and reducing workplace accidents by 25% annually. Experienced in predictive modeling, with a notable project cutting expenses by 69.8% through a customer churn prediction model. A blend of engineering expertise, analytical skills, and a commitment to innovation drives my passion for efficiency and impactful results.

WORK EXPERIENCE

Project Assistant

PT. MUIS Dikakarya

Jan – Jun 2024

- Successfully supervised the construction of a power plant monitoring analytics dashboard room project from E2E.
- Supervised and analyzed project requirements by the contract and supporting the coordination of projects
- Formulated report and analysis on project and procurement. Managed stakeholders regarding project milestones.

Sustainability Development & HSE Officer

Pou Chen Group Indonesia

Mar 2022 – Dec 2023

- Successfully established and led major digital transformation reporting project by maintain and analyzed 5,000+ data/month to reduced workplace accidents by 25% annually
- Led and enhanced an 80% Retrofit Machine Project from 3000+ old machine, significantly improving machine safety performance and reduced risk severity and frequency from High to Low
- Developed and analyzed comprehensive Machine Safety Programs, including machine guarding, safe machine operation, pressure vessels, and laser safety, through periodic inspections, procedure reviews, and HIRAC assessments
- Conducted Analysis Machine Risk Assessments in alignment with ISO12100, achieved 100% safe machine target. Also managed Fire Safety Management (FSM) and Emergency Response Plan (ERP), including fire safety inspections, chemical inventory reviews & emergency drill
- Monitored and Conduct Analysis Safety, Health, Environment & Energy (HSEE) performance in machinery processes using Excel and ENABLON (Risk Management System). Supported accident investigations, developed risk management practices, and resolved HSEE issues through continuous improvement and maintain Behavior Based Safety initiatives

Product and Business Management (Internship) | [Credential](#)

PENS Sky Venture

Aug – Oct 2020

- Initiated an application and website product to solve the high electricity consumption expenditure of industry and housing with an offer to reduce costs by 65.4%. Conducted market research of PLN customers with the result that 250.000+ customers experienced a 200% increase in electricity costs
- Created business strategies using BMC (Business Model Canvas) to obtain product feasibility in business and operational implementation structures
- Created wireframe for product landing page and mobile app UI/UX using Figma

PROJECT EXPERIENCE

E-Commerce Customer Churn Analysis & Predictive Modeling Classification Approach

E-Commerce is in a dynamic and competitive business world, the way customers behave is so volatile that companies perceive customer churn. Our task is to gather insights based on data and what factors affect customers to churn. Using insights gained, we provide recommendations for business & marketing strategies improvement and create dashboard & tools to streamlined the marketing team's prediction of customer churn. We have also developed a model that successfully allows company to reduce 69.8% retention and acquisition costs.

[\(Deck | Source Code\)](#)

Used Car Prices in Saudi Arabia Analysis & Predictive Modeling Regression Approach

The problem that often occurs in the business of buying and selling used cars is the uncertainty of the price of the car. Our task created a model that can predict the price of a used car based on the specifications of the car. The price generated by this model will be a reference for car sellers and buyers when buying and selling used cars. Successfully developed a predictive model that successfully allows used car websites to help visitors estimate and predict the selling/buying price of cars with low error predicted price in evaluation metrics MAE 15767 SAR and MAPE 1.2%.

[\(Deck | Source Code\)](#)

Supermarket Customers Data Analysis Using RFM (Recency, Frequency, Monetary) Method

Due to the high level of basic needs and interests, supermarkets are the first choice for people to access and get their daily supplies. However, people increasingly have quite dynamic comparisons and preferences. Our task is Enhancing Promotion through Analysis of Supermarket Customers Behavior using RFM (Recency, Frequency & Monetary) Method. Using that method, we provide recommendation by segmenting 80% of customer that 'Need Attention' and 'Promising Customers' and Focusing marketing target 'Need Attention' customers with [win-back] campaigns and Key Personalization Promotion, also dashboard for marketing teams to simplify their target.

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EDUCATION

Purwadhika Digital Technology School

Feb – Aug 2024

Data Science & Machine Learning Bootcamp (Graduate)

Committed 13 weeks on intense program that full of practical assignments and projects to refine data science & machine learning skills which taught by leading industry practitioners from South East Asia. Several Projects and curriculum that I did:

- SQL (Data Query, Data Manipulation, Data Definition, Data Analysis), Python Programming Language (Data Analysis, Machine Learning (Modeling Supervised Learning & Unsupervised Learning) & Data Visualization), Tableau (Data Visualization, Data Story Telling & Dashboard).
- Projects from Business Problem: Customer Analysis (RFM & Cohort Method), Business Analysis, Product Analysis, Scikit-learn implementation, Market Research Analysis & Predictive Modeling (Regression & Classification Approach)

Politeknik Elektronika Negeri Surabaya

Jul 2017 – Jul 2021

Bachelor of Applied Energy Engineering Degree (GPA: 3.32/4.0) | [Credential](#) | [Thesis](#)

Undergraduate Thesis: “**Design of Steam Power Plant Condenser Machine Maintenance Using RCM (Reliability Centered Maintenance) Methods with RCPS Implementation**”

LICENSES & CERTIFICATION

- **AWS Cloud Practitioner Essentials** – AWS training and certification
August 2024 - No Expiry Date | [Link](#)
- **Data Science & Machine Learning** – Purwadhika Digital Technology School
August 2024 - No Expiry Date | [Link](#)
- **Python Data Science** – Sanbercode
January 2024 - No Expiry Date | [Link](#)
- **Google Analytics for Beginners** - Google Academy
November 2023 - November 2026 | [Link](#)
- **Product Management** – Apiary Academy
March 2024 - No Expiry Date | [Link](#)
- **Project Management** – Teknokrat Muda Indonesia
February 2022 - No Expiry Date | [Link](#)

ACTIVITIES & ORGANIZATION EXPERIENCE

Energy Student Association

Head of Entrepreneurship Department (2019 – 2020) | [Credential](#)

- Responsible for all work programs, agendas, and members for the smooth running of all work programs
- Formulated profit-increase schemes for organization and managing org. fiscal power

Staff of Entrepreneurship Department (2018 – 2019)

- Responsible for implementing entrepreneurial work programs that focus on product sales, charity, & entrepreneurship event
- Conducted sales recapitulation, monitor product, & operational sales

Energy in Challenge 2019 (Java - Bali)

Chief Executive of Event and Organizer (2018 – 2019) | [Credential](#)

- Successfully organized the program study biggest event that participated by 500+ college and school students across Java-Bali
- Led 70 people from all division to organize and operate the events
- Organized and conducted cross-functional meetings to make alignment for the event

ACHIEVEMENTS

International Electronics Symposium (IES) 2021 (September 29th – 30th 2021) | [Publication](#)

International Level

- Thesis research qualified for international publication at IEEE Xplore
- Presenting research on conference that held at the Sheraton Hotel Surabaya in English setting.

SKILLS

Skills: Python, MySQL Database & Query, R, Tableau, Microsoft Office, Google Suites, Looker Studio, Google Analytics, Statistical Data Analysis, Data Visualization, Visio, Miro, Data Analytics, Scikit-learn, Canva, Machine Learning, Predictive Modeling, Data Cleansing, Data Wrangling, Product Research, Jira, Git & GitHub, Data Visual Studio Code, Big Query, Figma, AWS Cloud.

Languages: Bahasa Indonesia (Native), English (Advanced), Arabic (Elementary), ETOEFL (Score: 573)