

ALIF WAHYU SYAHNANDA

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SUMMARY

I am a Data Enthusiast with Energy Engineering background and experience in HSE-Sustainability for about 2 years with 20,000+ employee manufacturing industry. My passion for technology and business is driven by a commitment to data-driven sustainability. I excel at **identifying problems and using data to create impactful solutions** that improve products and enhance business operations. During an internship at a tech startup incubator, I developed skills in data analysis, market research, and solution design. This experience deepened my belief in the importance of **data-driven decision-making**. To further this, I expanded my expertise in data science through training at Purwadhika Digital Technology School. My blend of engineering knowledge, analytical skills, and a data-driven mindset allows me to approach challenges creatively and effectively. I'm excited to apply these strengths in data science and analytical to make a meaningful impact within a dynamic organization. I thrive on continual growth, supported by a strong work ethic and excellent communication skills.

SKILLS

Technical Skills: Python, SQL, R, Tableau, Power BI, Microsoft Office, G-Suites, Looker Studio, Google Analytics, Visio, Miro, Data Analytic, Scikit-learn, Canva, Predictive Modeling, Time Series Analysis, RFM Analysis, Product Research, Design Thinking, Jira.

Soft Skills: Analytical Thinking, Problem Solving, Collaborative, Project Management, Product Management, Data Story Telling, Public Speaking, People Management, Adaptability, Critical Thinking, Agile, Conflict Management, Leadership, GDPR Mindset.

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

PROJECTS

E-Commerce Customer Churn Analysis & Predictive Modeling Classification Approach | [Presentation](#) | [Source Code](#)

- Successfully streamlined retention and acquisition costs by 69.8% by implementing Machine Learning to predict customer churn
- Analyze the effect of customer characteristics and habits data on churn

Used Car Prices in Saudi Arabia Analysis & Predictive Modeling Regression Approach | [Presentation](#) | [Source Code](#)

- Successfully create XGBoost model for predicting used car prices in Saudi Arabia with 98% accuracy and 1% error.
- ML (Machine Learning) can be used by used car sales websites to help visitors estimate the selling/buying price of cars

Supermarket Customer Data Analysis Using RFM (Recency, Frequency, Monetary) Method | [Presentation](#) | [Source Code](#)

- Enhancing Promotion: Analysis of Supermarket Customers Behavior using RFM (Recency, Frequency & Monetary) Method by segmenting 80% of customer that 'Need Attention' and 'Promising Customers'
- Focusing target 'Need Attention' customers with [win-back] campaigns and Key Personalization Promotion

Clustering of countries in crisis for international using KMEANS Unsupervised Learning | [Presentation](#) | [Source Code](#)

- Successfully gave the best cluster for \$10 million aid to the 5 most crisis countries based on the features and cluster created
- Using KMEANS Clustering to get strategic and effective decision-making

SYNERE Start-up (Digital Energy Audit Platform & Electrical Planning Solution) | [Pitching](#) | [Research](#) | [Prototype](#)

- 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
- Create business strategies using BMC (Business Model Canvas) to obtain product feasibility in business and operational implementation structures

EDUCATION

Purwadhika Digital Technology School

Jan 2024 – Present

Data Science & Machine Learning Bootcamp

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), Scikit-learn implementation, Market Research Analysis & Predictive Modeling (Regression & Classification Approach)

Politeknik Elektronika Negeri Surabaya

Jul 2017 – Jul 2021

Bachelor of Applied Engineering | [Credential](#) | [Publication](#)

Cumulative GPA: 3.32/4.0

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

PROFESSIONAL EXPERIENCE

PT. MUIS Dikakarya – General Contractor

Jan 2024 – Jun 2024

Project Assistant

- Supervise projects as required by the contract and supporting the coordination and management of projects
- Communicating with stakeholders regarding project needs and goals, also Keep track of report on project and procurement

Sustainability Development Engineer & HSE Officer

- Led and enhanced an 80% Retrofit Machine Project, significantly improving machine safety performance and reducing risk severity and frequency from High to Low
- Developed and maintained comprehensive Machine Safety Programs, including machine guarding, safe machine operation, pressure vessels, and laser safety, through periodic inspections, procedure reviews, and HIRARC assessments
- Conducted Machine Risk Assessments in alignment with ISO12100, achieving a 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 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 Behavior-Based Safety (BBS) initiatives

PENS Sky Venture – Tech Startup Incubator

Aug 2020 – Oct 2020

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

- Conducted market research using survey data focused in Surabaya, Gresik, and Sidoarjo to gather feedback from PLN customers for solution conceptualization using Design Thinking and Conducted elevator pitch to stakeholders
- Created wireframe for product landing page and mobile app UI/UX using Figma

WORKSHOP & CERTIFICATION

- **Data Science Introduction** –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
Nov 2023 - Nov 2026 | [Link](#)
- **Product Management** – Apiary Academy
March 2024 - No Expiry Date | [Link](#)
- **Intro to Data Analytics** – RevoU
April 2023 - No Expiry Date | [Link](#)
- **Project Management** – Teknokrat Muda Indonesia
April 2023 - No Expiry Date | [Link](#)
- **OHS Management System Auditor (Auditor SMK3)** – Kementerian Ketenagakerjaan RI
April 2023 - No Expiry Date | [Link](#)
- **General OHS Expert (Ahli K3 Umum)** – Kementerian Ketenagakerjaan RI
April 2023 - 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 and agendas
- Planning 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 accepted for international publication at IES 2021
- Presenting research on conference that held at the Sheraton Hotel Surabaya
- Thesis research published on the IEEE Xplore