

# Henry Samuel Manurung

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in Henry Samuel Manurung

nrysam

#### **SUMMARY**

Data Scientist with over 3 years of professional experience in data analysis, machine learning, and computer vision. Proven track record in leveraging data to drive business growth, enhance product development, and solve complex challenges. Proficient in Python, TensorFlow, PyTorch, SQL, and Tableau. Experienced in leading cross-functional teams and implementing innovative solutions to deliver actionable insights. Committed to continuous learning, holding certifications in Machine Learning, Data Science, Business Intelligence, and Product Management. Excels in dynamic environments that foster critical and creative thinking, passionate about contributing to impactful projects in Data Analytics, Data Science, and Machine Learning.

#### WORK EXPERIENCE

# DA Technology Karawang

Computer Vision (비전) Team Leader

Aug 2023 – Present

- Lead a team to analyze defects in battery cell production using computer vision, improving product quality by 20%.
- Automate data file analysis with a Python script, reducing processing time from 25 minutes to under a minute.
- Implementing image processing and object detection techniques to identify patterns, shapes, and features in images for cell battery.
- Train machine learning models using TensorFlow, enhancing image classification and recognition accuracy.
- Develop Excel VBA macros for data filtering, improving CPK machinery calculations.
- Direct ETL processes to transform raw data into actionable insights, driving process improvements.
- Develop comprehensive warehouse inventory reports for operational efficiency.
- Develop Warehouse Inventory Report for Warehouse Team.
- Develop Face Recognition for Attendance.

Shopee Jakarta

**Business Development Analyst** 

Feb 2022 – Aug 2023

- Developed a personalized tracker for shop monitoring, boosting operational efficiency by 30%.
- Analyzed advertising campaigns, optimizing strategies to achieve a 25% increase in ROI.
- Conducted market trend analysis and implemented A/B testing, increasing conversion rates by 15%
- Prepared and delivered presentations to seller, providing regular updates on campaign performance, key findings, and actionable recommendations.
- Generate more than \$600,000 USD as a company revenue.
- Became an ads consultant and have a live 1-on-1 consultation with chosen sellers to increase its sales, profit, and awareness.

- Provided valuable insights and knowledge about Shopee Ads as a live speaker to 5000+ sellers through Shopee webinar.
- Acted as the key person in the Paid Advertisement Division and frequently contacted by cross-functional teams for information and answers related to Shopee Ads features and functionality.
- Collaborated with cross-functional teams to solve Shopee Ads issues using JIRA.
- Utilized Shopee Data Suites to extract, organize, and interpret relevant information for maximizing Shopee Ads Campaigns to seller.

## **HPI-Agro (PT Muria Sumba Manis)**

#### Sumba

Boiler & Power Plant Staff

Oct 2020 - Jan 2022

- Supervise teams for daily operations of the Power Plant, ensuring efficiency and sustainability.
- Designed WWTP reservoirs using AutoCAD, improving environmental sustainability and operational efficiency.
- Developed Database for storing daily operation metrics using SQL.
- Analysed operation trends and acted as decision maker to improve the metrics.

#### **EDUCATION**

## **Bandung Institute of Technology (ITB)**

## **Bandung**

Bachelor of Science in Mechanical Engineering

Aug 2015 – Jan 2020

**Final Project**: Bandung Municipal Solid Waste Combustion Simulation on Small Incinerator using Flic and Fluent

**Mechanical Project**: Led a collaborative team of three members on a significant mechanical project, designing and assembling the innovative '2-in-1 Vacuum Dryer.'

Project Showcase: Showcased the '2-in-1 Vacuum Dryer' at the prestigious Mechanical

Exhibition in 2019, demonstrating innovative engineering solutions to a

wide audience.

#### PROJECT PORTFOLIO (click here)

# Forming UCL 22/23 XI of the Tournament Analysis (click here)

- **Summary**: The project focused on analyzing the dataset of football players played in UCL Season 2022/2023. It leverages advanced statistical methods and data visualization techniques to evaluate and select the top performers for each position.
- **Result :** Delivers interactive visualizations such as heatmaps, bar plots, radar charts, and violin plots, aiding in the insightful comparison and selection of top performers. The final output includes a dynamically generated "Best XI" team.

## **CNN-based Car Part Identifier: A Machine Learning Approach (click here)**

- **Description**: The project develops a CNN-based car part identifier to accurately classify images into 50 different categories of car components. The project is segmented into multiple scripts handling data preprocessing, model training, performance evaluation, and result visualization.
- **Result**: The final model achieves a robust classification accuracy, demonstrated through detailed accuracy and loss graphs over training epochs, as well as a confusion matrix illustrating class-wise performance.

#### LSTM-based Yelp Review Sentiment Analysis (click here)

• **Description**: This project is centered around analyzing Yelp reviews using a deep learning approach to categorize sentiments as positive or negative. The process is methodically

divided into several scripts covering data preparation, model training, sentiment prediction, and evaluation.

• **Result**: Achieves detailed sentiment analysis with the capability to identify nuanced expressions in reviews.

# **Face Fatigue / Drowsiness Detection (click here)**

- **Description**: Combined face recognition and fatigue detection models to identify users' fatigue status from webcam video input.
- **Result**: Achieved real-time fatigue detection, improving user safety and monitoring.

# Face Recognition Attendance (click here)

- **Description**: This project implements a sophisticated attendance tracking system using face recognition technology. The workflow encompasses face registration, encoding, and real-time attendance monitoring, ensuring accurate and efficient attendance logging.
- **Result**: The system successfully captures and registers faces, encodes them for recognition, and updates attendance records in real-time.

## **CERTIFICATION**

- DeepLearning.AI TensorFlow Developer
- Python Data Science
- Business Intelligence
- Product Management

#### **SKILLS**

**Computer Skills:** Python, TensorFlow, PyTorch, NumPy, Scikit-learn, Pandas, Tableau, MySQL, MATLAB, JIRA, VBA, Docker, YOLO, Git.

**Technical Skills:** Analytical Thinking, Problem Solving, Face Recognition, Deep Neural Network, Convolutional Neural Network, Recurrent Neural Network, Natural Language Processing, Machine Learning, Leadership, Data Wrangling, Exploratory Data Analysis, Data Visualization, Market Analysis, Collaboration, Innovation, Data-Driven Decision Making, Project Management.