# Mangara (Paul) Alexander Hutagalung

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A data Visionaire with 6+ years of experience and skills in data analytics and behavioral science

combined with the ability to turn insights into actionable items and products.

**Language:** Bahasa (native) | English (professional)

### **Education**

AUGUST 2021 - MAY 2023

**UNIVERSITY OF PENNSYLVANIA, United States** - Master's Degree (Behavioral and Decision Science)

AUGUST 2010 - AUGUST 2014

**UNIVERSITY OF INDONESIA, Indonesia** - Bachelor's Degree (Economics: Majored in Marketing Management)

## **Experience**

JULY 2022 - PRESENT

PENN DATA SCIENCE GROUP (PDSG), Philadelphia - Data Scientist

- Led a project to build a classifier to predict UPenn researchers' Sustainable Development
  Goals based on their online biography. The model took 2 months to build and has a 75%
  accuracy rate of identifying the correct SDG tag given their online biography. The model was
  built by stacking multiple classifiers, such as SVM, Naive Bayes, Logistic Regression, BERT, and
  several others.
- Analyzed UPenn's Facilities and Real Estate Services' (FRES) electricity consumption by understanding, recreating, and pointing out potential algorithm improvements. We managed to improve the model's MAE from 150% down to 15-20%.
- Developed a financial dashboard for FRES' accounting and financial team using Power BI. In this project, I handled the automation of updating the dashboard given new data input at FRES' database.

#### DECEMBER 2018 - DECEMBER 2021

GOJEK, Indonesia - Data Analyst (DEC 2018 - MAR 2020); Product Manager (MAR 2020 - DEC 2021)

- Led the data partnership initiative and built products with leading companies in each industry, such as Alfamart, Hypermart, Vidio, Bukalapak, TradeDesk, InMobi, and Google, by integrating our data with theirs.
- Created a product called Audience Segmentation Dashboard, where any Gojek employee and partner can choose any combination of 100+ user behaviors and build their custom segmen
- ts. This product has contributed up to USD 2M+ of revenue up until December 2021.
- Contributed a direct revenue of USD 200K+ from data partnership with TradeDesk and InMobi from Custom Audience Segmentation and O2O (Online to Online/Offline) Measurement products up until April 2021.

- Led all experiments regarding audience behavior monetization, one of which resulted in the creation of an Online to Offline Measurement product, making Gojek a pioneer in this type of measurement product in Indonesia.
- Created product performance analysis for all Gofood-related products, such as vouchers, SKU
  promotions, digital ads, and gave recommendations to improve the performance of each
  product from a statistical point of view.
- Created automated SQL scripts that are now used as the base for several of Gojek's products, such as predicting users' home location, users' active state for each merchant, and merchants' incremental transactions.

#### NOVEMBER 2017 - NOVEMBER 2018

### **UNISTELLAR MEDIA GROUP**, Indonesia - *Product Manager*

- Developing and improving one of Unistellar's media portfolio, Boombastis, performance from 200th to 60th regarding website ranking in Indonesia.
- Improved the website's loading speed from around 5-6 seconds to 2-3 seconds and improved the UI and UX design to have high mobile compatibility.
- Integrated other Unistellar portfolios, such as Asumsi and Hivemind, with Boombastis to create a supportive ecosystem between products.

### Skills

- Data analysis - Data visualization - NLP

Product development
 Experimental design
 Machine learning
 SQL (advance)
 Python (intermediate)
 R (intermediate)
 Product growth
 Product analysis

# **Awards & Recognition**

- Completed the Google Foobar challenge, Google's invitation-only secret hiring test, without having a proper software engineering background.
- Rank 17th on an efficiency leaderboard for a Kaggle competition called Feedback Prize -English Language Learning (team name: PDSG).
- Won Gold in the Programmatic category in MMA APAC, one of the biggest digital marketing competitions in Asia Pacific, in 2020.

# **Example of Portfolios & Projects**

- <u>SDG classifier</u>: created a classifier by stacking multiple models together that takes texts that are generated from a web scraper as an input and returns SDG categories (accuracy = 75%)
- <u>Spotify recommendation engine</u>: created a recommendation engine using XGBoost classifier (accuracy 92.7%) that takes Spotify songs' features scrapped from their API
- <u>Customer lifetime value analysis</u>: created a product performance analysis based on it's customer lifetime value, as well as creating a linear regression model to predict its future value