
Marcello Roy

Portfolio professional

 Portfolio

 CV





Introduction



About me

- My name is Marcello Roy. I'm a passionate and driven individual with a strong interest in technology, data, and development. I thrive on solving problems and continuously learning new skills to enhance my abilities. My journey has led me to work on a variety of personal and academic projects, each contributing to my growth and curiosity in this field.

Personal projects

- Vehicle Detection with CNN – Built a CNN model to detect vehicles in images for traffic and surveillance applications.
 - SMS Spam Detection with LSTM – Developed an LSTM-based classifier to detect spam messages from legitimate ones.
 - Customer Profile Analysis – Used K-Means clustering to segment customers based on behavioral and demographic data.
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Professional Experience



2023 ————— 2024 ————— 2025

Data Analyst Intern – PT Karya
Generasi Nusantara

Collected and cleaned data for analysis. Used K-Means clustering for customer segmentation and supported business decision-making.

Big Data Lab Assistant – UMN

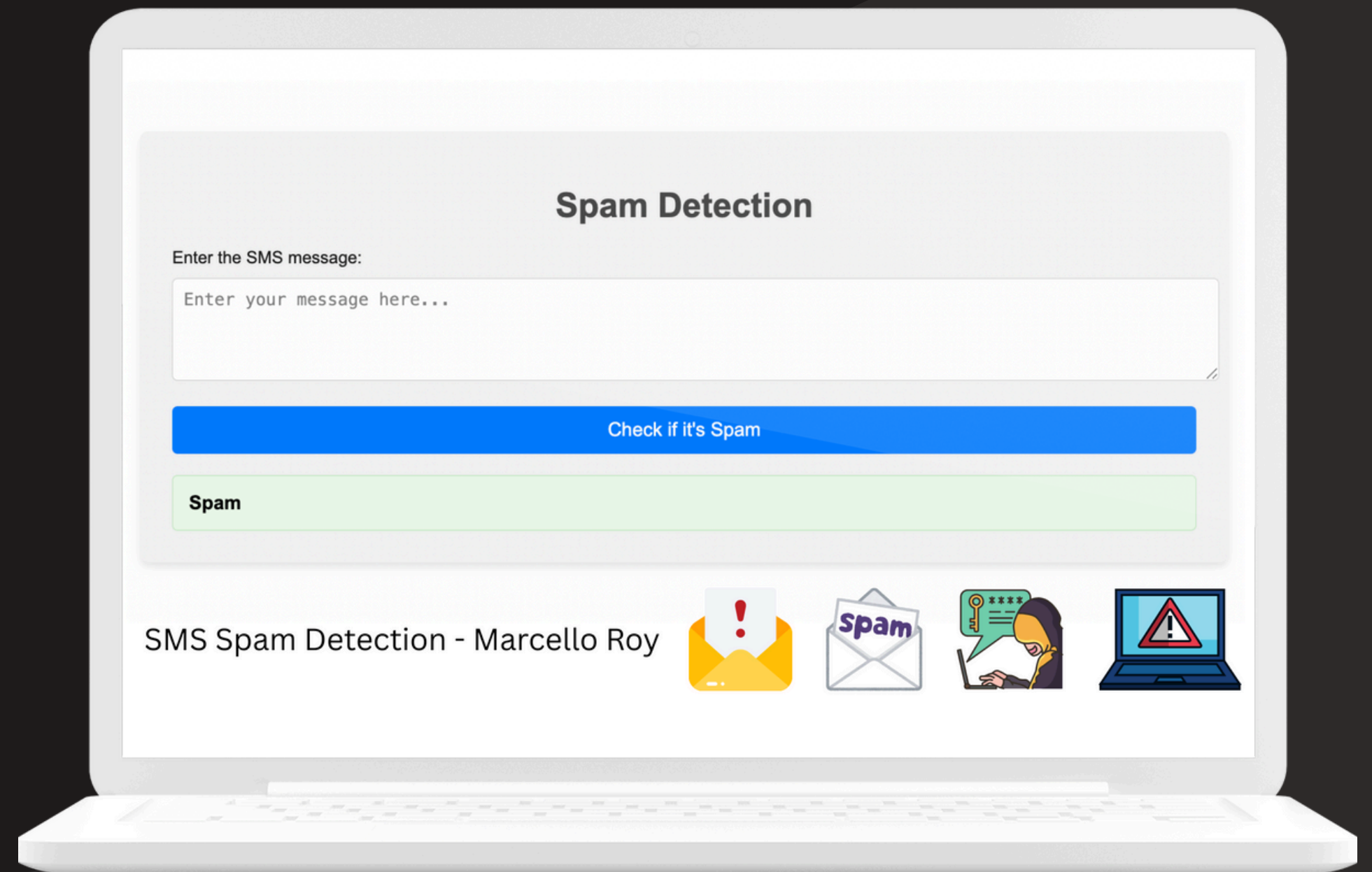
Assisted in big data lab sessions, helping students with tools and concepts. Managed lab software and infrastructure.

Advanced Big Data Lab Assistant
– UMN

Guide students in advanced big data analytics using Hadoop, BigQuery, and SAS. Maintain lab systems and support practical sessions.

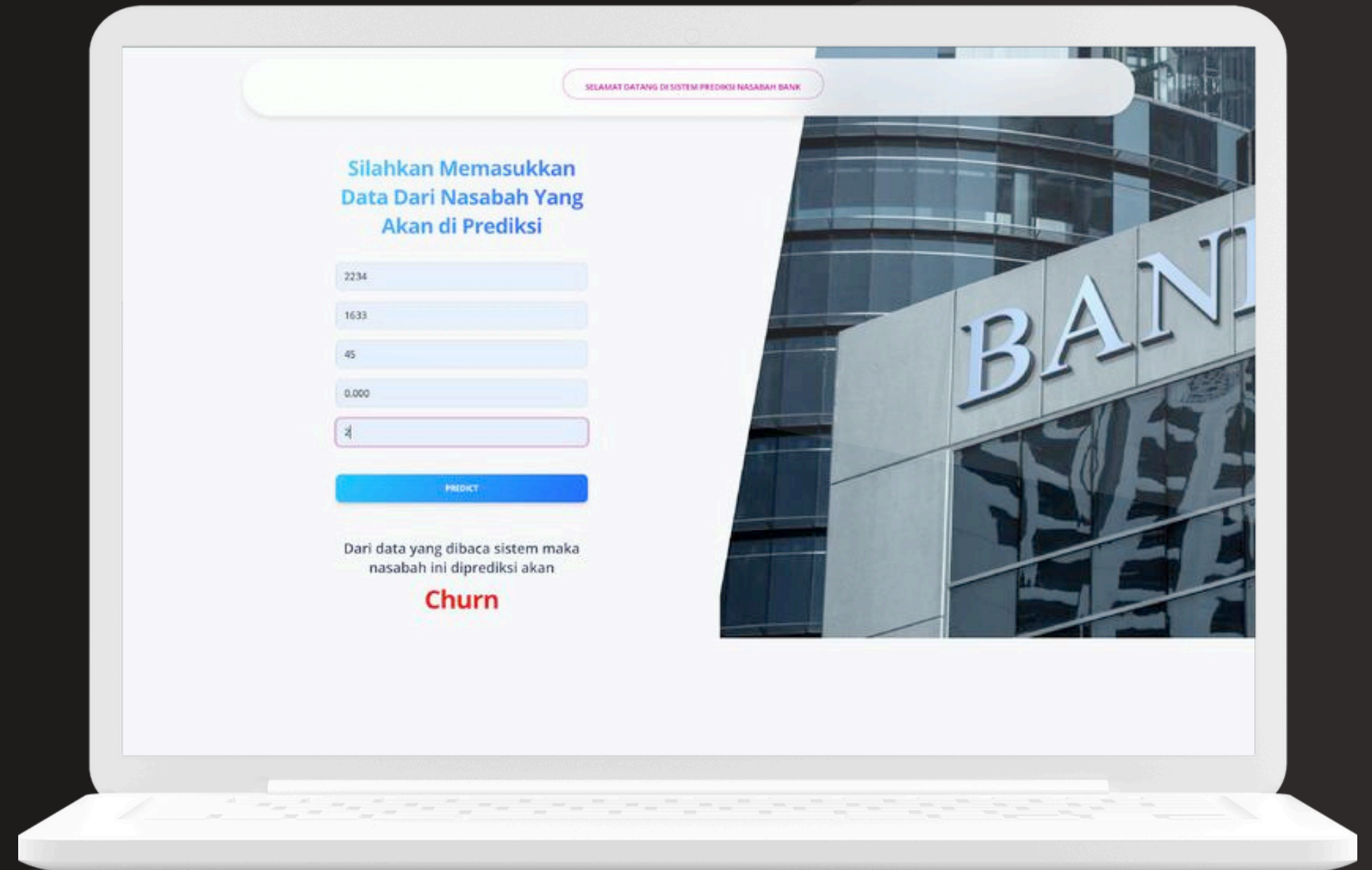
SMS Spam Detection with LSTM

This project focuses on developing a deep learning model to classify SMS messages as spam or legitimate using Long Short-Term Memory networks. By analyzing the sequential structure of text data, the model effectively captures contextual patterns that traditional models may miss.



Navigating Bank Churn

Compare the performance of Decision Tree and SVM models in identifying bank customer churn. I used CRISP-DM methodology to highlight the visual interpretability of Decision Trees and SVM's capability in handling complex data.





Educational Background



Multimedia Nusantara University

2022 - 2025

Currently pursuing a Bachelor's degree in Information Systems. Focused on data analysis, big data technologies, and software development, with hands-on experience in labs and research projects related to machine learning and analytics.



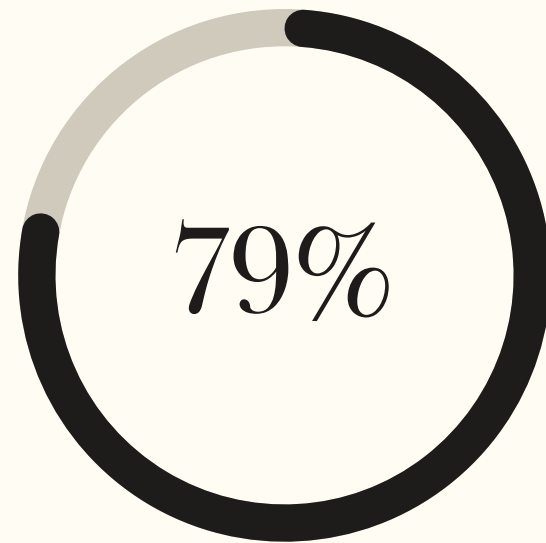
School of Computer & Network

2019 - 2021

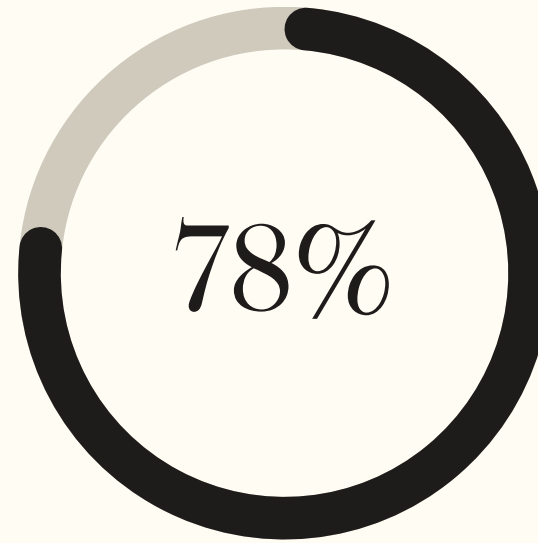
Studied computer and network technology, covering topics such as computer hardware, network infrastructure, server configuration, and basic cybersecurity. Developed a strong foundation in IT systems and technical troubleshooting.

Personal Skills

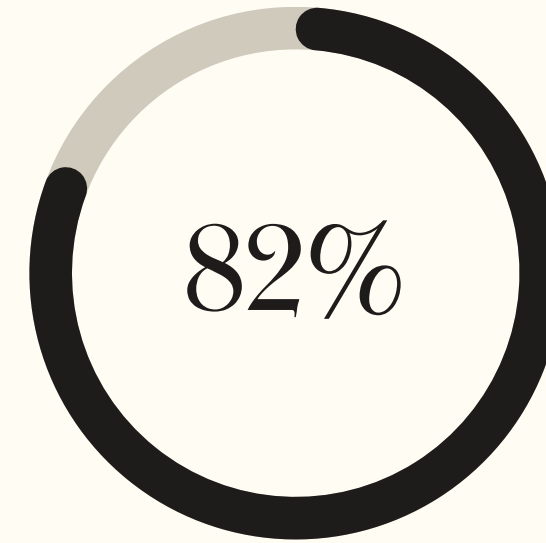
A versatile set of technical and analytical skills developed through academic projects and hands-on experience in data science, programming, and AI.



Python

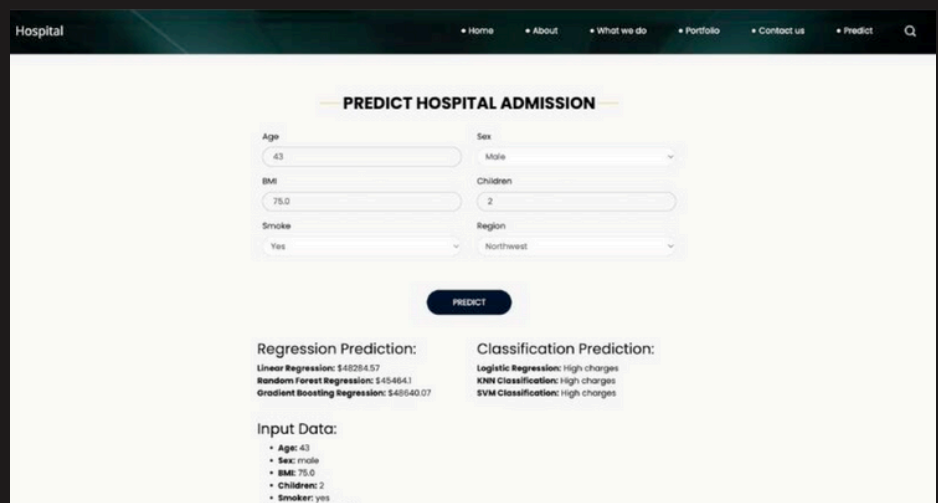


R



Artificial
Intelligence

Project Portfolio



MEDICAL PRICE PREDICTION

I used machine learning to predict hospital billing costs by analyzing patient data, helping healthcare providers improve financial planning and make more informed decisions.

[Medical Price Prediction](#)



CUSTOMER BEHAVIOR REPORT

Analyzed credit card customer churn using machine learning and Tableau, creating dashboards to support marketing, risk management, and retention efforts.

[Customer Behavior Report](#)

Customer Segmentation Form

Income: 92910.0
Number of Kids: 1
Number of Teens: 0
Age: 50
Partner: No
Education Level: Postgraduate

Submit

Customer Segmentation Result:
Predicted Cluster: Cluster 2

CUSTOMER SEGMENTATION

Performed K-Means clustering to segment customers, enabling targeted marketing, personalized strategies, and improved business decision-making.

[Customer Segmentation](#)



Let's Work Together



+62-813-9808-6054



About Me



marcello2k18@gmail.com



Buana Gardenia