I GUSTI BAGUS RAMADHA SAVERIAN RANUH

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SUMMARY

I'm a passionate Data Science and Machine Learning with a strong background in Computer Science, streaming in Intelligence System. Competent in Data Analyst and ML Engineer using diverse programming tools such as Python, SQL, java, and utilizes framework such as Streamlit and Gradio. Capable for technical problem-solving and social impact initiatives. I'm eager to contribute my abilities in predictive modeling and contribute to achieving organizational goals through data-driven strategies.

EDUCATION

BINUS UNIVERSITY – Jakarta, Indonesia Sept 2022 – Present
Bachelor of Computer Science - GPA 3.90/4.00
Streaming: Intelligent System

ORGANIZATION

UREEKA BINUS – Jakarta, Indonesia April 2024 – Present
Member at UREEKA BINUS University
- Engaging in data mining training through UREEKA, collaborating in teams to compete in various data competition.

Data Science Club – Jakarta, Indonesia Sept 2024 – Present
Member at BINUS University
- Actively collaborate with fellow members participate in workshops and engage in discussions to enhance skills in machine learning, data analysis, and research methodologies.

EXPERIENCE

Applied Mathematics Exchange Student at CYCU – Online February 2023 – July 2023
Grade : A-
- During my second semester in Binus, i had the opportunity to participate in an online semester course exhchange program at Chung Yuan University (CYCU).
- Gain exposure to an international academic environment early in my academic.

Freshmen Partner – Semarang, Indonesia Sept 2023 – July 2024
Freshmen Partner at BINUS @Semarang
- Guides freshmen by sharing essential experiences and materials to help them navigate first-year university life with focus and enjoyment.

Tutor – Semarang, Indonesia Sept 2023 – January 2024
Tutor at BINUS @Semarang
- Taught two subject: Algorithm & Programming and Discrete Math to first-semester students.
- Voluntarily conducted two classes weekly, each session consistently attracted over 10-12 students, to assist students struggling with course material, helping them improve their understanding and achieve their academic goals in particular subjects.

Data Science Dicoding Bootcamp – Online October 2024 – Present
Enrolled in Dicoding Bootcamp Online
- Learning 600+ hours of intensive data science and ML program during 6 months designed to equip digital talents with industry-standard skills.
- Working with final capstone projects that apply data science and machine learning techniques to real-world problems.

ACHIEVEMENTS

10th National Finalist ADSE Competition – Jakarta, Indonesia April 2024 – August 2024
National Finalist ASEAN Data Scientist Explorers Competition Issued by ASEAN Foundation and SAP
- Developing a pioneering data-driven applicationa and solution for the 2024 ASEAN Data Scientist Explorers Competition focuses on "Enhancing Waste Management through Integrated Waste Banks and Gamification Incentives," aims for advancing sustainable waste management practices across ASEAN countries.

20th Finalist SOCS AI For Accessibility Hackathon – Jakarta, Indonesia April 2024
Finalist School of Computer Science Hackathon 2024 BINUS x Microsoft (AI4A)
- Builds a mobile web application designed to assist those with vision impairments in identifying objects and text from a distance or from areas inaccessible with a white cane (upper body). making use of Microsoft Azure features including Speech Service, Translator, and Computer Vision. Everything will be spoken, from text to speech.

Researcher at ICCSCI – Jakarta, Indonesia August 2024

Researcher at ICCSCI held by Procedia Computer Science and Elsevier

- Conduct a research paper presented at the International Conference on Computer Science and Computational Intelligence (ICCSCI), focusing on a comparative analysis of deep learning algorithms for the classification of hyperpigmented skin diseases. The study explored performance metrics across various models to optimize diagnostic accuracy.

SKILLS

- **Programming Language :** Python, C/C++, Java, HTML, CSS, JavaScript
- **Frameworks:** Streamlit, Gradio, React
- **Database Management System:** MySQL, MongoDB
- **Data Visualization:** Tableau, SAP Analytic Cloud
- **Deep Learning:** TensorFlow, Keras, PyTorch
- **DevOps:** Git/GitHub, Docker
- **Data Science & Miscellaneous Technology:** A/B Testing, ETL, Data Pipeline, Statistics, Time series, Experimental design, Hypothesis testing, OOP, APIs
- Natural Language Processing (NLP)
- Computer Vision

PROJECTS

NLP LLM-RAG-Based Chatbot Model

Python, LLM, RAG, Llama CCP, Llama Index, Gradio

This project implements an AI chatbot using Large Language Models (LLM) and Retrieval Augmented Generation (RAG) techniques to provide detailed answers based on knowledge extracted from PDF documents, integrating LlamaCPP for LLM functionality and llama_index for effective document management. The system leverages medical knowledge from PDF documents to provide enhanced natural language responses and advanced information retrieval.

Speech Emotion Recognition

Python, CNN, TensorFlow, Keras, Librosa

Developed a Speech Emotion Recognition system using Convolutional Neural Networks (CNN) with TensorFlow. The project involved training a model to recognize emotions from speech input, utilizing audio features for accurate emotion classification.

Patient's Condition Classification Using Drug Reviews

Python, XGBoost, PAC, Logistic Regression, KNN, SVM, Random Forest, Streamlit

Analyze the disease description to predict the specific medical condition or diagnosis using multiple advanced machine learning algorithms (XGBoost, PAC, LR, and more). The project also applies text processing techniques including CountVectorizer, TFIDFVectorizer, and Word2Vec to analyze user reviews from a dataset. The project then deploys in Streamlit.

Youtube Scraping Sentiment Analysis

Python, Logistic Regression, LSTM, Google Cloud

Developed a sentiment analysis project by scraping YouTube comments with the Google Cloud YouTube API v3 and applying three models: Random Forest with TF-IDF, Logistic Regression with TF-IDF, and LSTM with Word2Vec. Achieved an average train-test accuracy of 85-91%.

Deep Learning Algorithms for Image Based Classification of Hyperpigmented Skin Disease

Python, YOLO, DenseNet201, GoogleNet, InceptionResNetV2, MobileNet

Analyze and compare for hyperpigmented skin disease using machine learning and deep learning techniques. The study analyzed pretrained models like YOLO, DenseNet201, GoogLeNet, InceptionResNetV2, and MobileNet. The study highlights DenseNet201 as the best performing model for accurate classification of hyperpigmented skin conditions, based on both accuracy and AUC. However, YOLO was ultimately chosen due to its effective object detection capability.

Doctor Hunter

Java, JavaFX, JDBC, SQL, MySQL

Doctor Hunter is a fun comprehensive GUI-based application project developed using JavaFX and connected to SQL database using JDBC, designed to streamline the process of scheduling doctor appointments and managing healthcare-related tasks.

MERN Based Predictive Finance Dashboard

MongoDB, Express.JS, React, Node.JS

This project will more effectively put insight into the hands of a business with respect to its financial data. Users can track and analyze, on this dashboard developed with MongoDB, Express.js, React, and Node.js, key financial indicators on profit, revenue, operational and non-operational expenses, and product pricing against their respective targets. Further, predictive analytics through regression modeling enable one to predict revenue with accuracy so that businesses can make strategic decisions and optimize their financial results accordingly.

SafeSight

Bootstrap, JavaScript, Node.Js, Express.Js, Docker, Cloudflare, Microsoft Azure

A mobile web application designed to assist visually impaired person in detecting objects and recognizing text in areas beyond their reach, where a white cane cannot be used for the upper body. The app uses Microsoft Azure services, including Computer Vision, Translator, and Speech Services, to provide real-time verbal feedback through text-to-speech, ensuring seamless accessibility and navigation.

CERTIFICATES

ASEAN Data Science Explorers 2024 National Final Indonesia | ASEAN Foundation | 2024

Oral Presentation | International Conference on Computer Science and Computational Intelligence (ISSCSI) | 2024

Certificate of Completion Samsung Innovation Campus Batch 5 Stage 1 | Skilvul | 2024

Certificate of Completion Samsung Innovation Campus Batch 5 Stage 2 | Skilvul | 2024

Belajar Analisis Data dengan Python | Dicoding Indonesia | 2024

Shell Nxplorers Training Certificate | Shell | 2024