Jonathan Carlo

Tangerang, Banten | *Linkedin* | *GitHub* | *Portofolio* | +62-811-883-515-1 | jonathancarlo20@gmail.com

EDUCATION

Bina Nusantara University – Tangerang, Banten *Expected September 2027*

School of Computer Science - *Bachelor of Computer Science*

***GPA* : 3.91/4.00**

Concentrations: Intelligent Systems

Honors : Head of Technic, BINUS TV Club (2024–2025)

Relevant Coursework : Machine Learning; Natural Language Processing; Software Engineering; Artificial Intelligence; Deep Learning; Computer Vision;

LEADERSHIP EXPERIENCE

BINUS TV Club – *Head of Technical Department* *February 2024 - Present*

- Entrusted with managing and maintaining professional-grade, high-value broadcasting equipment and studio facilities, and led a core technical crew of 5 while coordinating with over 60 cross-functional production members from BINUS TV and BINUS TV Club to deliver smooth and high-quality student-led broadcasts and live event productions.
- Served as Show Director, Camera Director, Unit Production Manager, and Technical Manager leading both technical and creative teams in delivering 10+ major live productions and events, ensuring smooth production with minimal errors in high-pressure environments through effective real-time decision-making and leadership.
- Helped elevate BINUS TV Club's organizational performance as measured by improved skill levels and production quality among junior members, actively training over 250+ members in broadcasting, equipment handling, and live production techniques by keeping a culture of technical excellence and teamwork in a healthy working enviroment.

PROJECTS

CineSpark AI – *Website* – *Source Code* **ReactJS | PostgreSQL | LangGraph | Paddle | Netlify | Git | Github**

- Built an AI-powered pre-production platform designed to transform how filmmakers plan, visualize, and develop their stories—featuring automated script generation and shotlist creation, with an integrated payment system.
- Developed a responsive and intuitive front-end using ReactJS, backed by a FastAPI + LangGraph REST infrastructure for AI workflow orchestration and real-time content generation.
- Utilized PostgreSQL and Supabase for secure and scalable database management, utilize Paddle for complete subscription and payment processing for monetization, with Git version control, and deployment via Netlify with GitHub-based CI/CD.

VISPA – *Website* – *Source Code* **NextJS | PostgreSQL | Supabase | Flask | Scikit-Learn | Vercel | Git | Github**

- VISPA is an interactive sign language learning platform designed to help users learn sign language through a combination of video lessons, interactive quizzes, and real-time sign detection.
- Implemented a machine learning system trained using a Random Forest model built with scikit-learn, utilizing a custom-built dataset and an end-to-end training pipeline for preprocessing, feature extraction, training, and evaluation.
- Built a scalable architecture with Next.js for the front-end interface, PostgreSQL & Supabase for persistent data management, and a Flask REST API for real-time model inference, with Git version control, and deployed using Vercel with GitHub-based CI/CD.

Hanacaraka Text Classification and Recgonition – *Source Code* **Tensorflow | Streamlit | Git | Github**

- A deep learning project for recognizing handwritten Javanese script (Aksara Jawa/Hanacaraka) characters using a fine-tuned ResNet50V2 model, complete with an interactive web application for real-time predictions.
- Utilized TensorFlow for model training and preprocessing, creating an end-to-end workflow from dataset preparation to deployment and using Streamlit to create interactive web application and enable real-time predictions and user-friendly testing of handwritten inputs.

Jabodetabek House Price Prediction – *Source Code* **ReactJS | Flask | Scikit-Learn | Pandas | Git | Github**

- Developed a web-based application to predict real estate prices in the Jabodetabek area using a fine-tuned Random Forest regression model trained on a regional housing dataset.
- Utilized Pandas for data analysis and visualization, and scikit-learn to train models and build an end-to-end machine learning pipeline with a ReactJS front-end implementation for user input and result visualization, and built a Flask REST API to serve the machine learning model and handle prediction requests.

SKILLS

- **Languages:** JavaScript, Python, SQL, HTML, CSS, TypeScript, C
- **Developer Tools**: Git, Github, Docker, Supabase, VSCode, Vercel, Netlify, Paddle
- **Libaries/Frameworks**: ReactJS, NextJS, PostgreSQL, Flask, FastAPI, Pandas, Seaborn, Scikit-learn, TensorFlow, LangGraph, OpenCV, Streamlit
- Native Indonesian Speaker; Fluent in English