

# **Bernard Santosa**

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#### **EDUCATION**

## **Binus University** | Bachelor of Computer Science

Sep 2023 - Present

- Cumulative GPA: 3.91 / 4.00
- Relevant Coursework: Algorithm and Programming, Data Structures, Machine Learning, Deep Learning, Software Engineering,
  Object Oriented Programming, Database Technology

#### **TECHNICAL SKILLS**

**Programming Languages**: Python, Java, C, JavaScript, TypeScript, HTML/CSS **Frameworks & Libraries**: React, Flask, Scikit-learn, Pandas, Laravel, TailwindCSS

Developer Tools: Vite, Git, GitHub, Google Colab, Power BI

#### **PROJECT**

RECourse | React, Python, Flask, Scikit-learn, Pandas, TypeScript, TailwindCSS

Sep 2025

- Develop a course recommendation web app by integrating Python backend with a modern front end with React, TypeScript and TailwindCSS
- Implemented a content-based recommendation system using cosine similarity and vectorization to analyze user input and provide relevant courses. The model also uses clustering to enhance its recommendation accuracy.
- Designed and deployed a RESTful API using Flask to serve a machine learning model, creating efficient endpoint for real-time communication between frontend client and backend server.

Al Job Salary Prediction | Python, Scikit-learn, Pandas

Oct 2025

- Analyzed dataset quality by checking missing values, outliers, and data types (categorical/numerical) to identify key features and target variable
- Preprocessed data for model training, including standardizing continuous values and encoding categorical features
- Built and optimized an XGBoost Regressor model to predict AI job salaries (R<sup>2</sup> = 0.9), identifying key factors such as skills, tools, and company size that influence compensation

Restaurant Recommendation and Sentiment Analysis | Python, Scikit-learn, Pandas

June 2025

- Cleaned and preprocessed restaurant review dataset (stopword removal, punctuation cleaning, lemmatization, stemming)
- Developed a sentiment analysis model using Naïve Bayes to predict positive or negative feedback
- Designed a recommendation engine using TF-IDF and Cosine Similarity to suggest restaurants based on review similarity

Coursera Course Analysis Dashboard | Power BI

May 2025

- Analyzed the 'Coursera Courses Dataset 2021' to identify key trends in course offerings, difficulty levels, and student ratings
- Developed a comprehensive, interactive dashboard in Power BI from scratch to visualize data patterns effectively
- Designed multiple linked visualizations (e.g., bar charts, word cloud, filters) to provide actionable insights for users selecting new courses

- Developed and implemented a REST API using Laravel (PHP) to handle user authentication (registration, login) and manage user profile data
- Architected the database structure by designing the Entity Relationship Diagram (ERD) and Use Case Diagrams
- Translated UI/UX designs from Figma into responsive frontend components using TailwindCSS

## **LEADERSHIP**

## OSIS SAPRAS – EFATA SCHOOL (SARANA DAN PRASARANA)

Jan 2022 - Nov 2022

- Managed equipment inventory and coordinated logistics for all school-wide events.
- Collaborated with student council divisions to plan and execute event technical requirements.

## **ADDITIONAL**

HCIA-AI (Huawei Certified ICT Associate - Artificial Intelligence) V3.5

Sep 2024

• Course certificate demonstrating foundational knowledge in AI principles, machine learning, deep learning, and industry applications using the Huawei Ascend platform.