# **DILA AYU PRASTITA**

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#### **SUMMARY**

I am an Informatics Engineering student at the Sumatera Institute of Technology with interests in Artificial Intelligence, Data Science, and innovative design. My expertise includes the application of AI techniques such as machine learning, natural language processing, and computer vision for intelligent automation, along with data analysis to build robust models. I gained experience in conducting course assignment projects related to machine learning, redesigning the Customs application using Figma with AI and machine learning in the GEMASTIK 2024 competition and actively becoming a Teaching Assistant for Human-Computer Interaction, focusing on the basics of UX/UI.

#### **EDUCATION**

Undergraduate Informatics Engineering Student – Institut Teknologi

**2021 - present** 

Sumatera (ITERA)

**Cumulative GPA: 3.55/4.00** 

#### **EXPERIENCE**

### Himpunan Mahasiswa Teknik Informatika (HMIF)

I served in the Informatics Engineering Student Association (HMIF) at the Sumatra Institute of Technology, starting as a staff member in the professional development and training division before being entrusted as the division head.

#### 1. Head of Development & Training Division Professionalism

Jan 2024 - present

- Leadership and Strategy: Setting the strategic direction of the division and organizing activity schedules, Allocating resources, Leading and motivating the team
- Program Development and Management: Supervise the organization of seminars/webinars, Manage final project exhibitions, Facilitate project and technology discussions, Coordinate workshop development,
- External Relations and Collaboration: Building relationships with industry professionals, Maintaining communication with other departments.

#### 2. Development & Training Division Staff Professionalism

Apr 2023 - Dec 2023

- Organize seminars/webinar on technology
- Held an exhibition of the final project of Itera informatics graduates
- Provides a platform to discuss together about projects and the world of technology
- · Holding workshops on technology themes such as html, css, and github

#### PEMIRA KM ITERA 2022

#### Staff of Voting at Implementasi Technology Division

Nov 2022 - Feb 2023

TMy team and I improved the PEMIRA website's design using Figma, ensuring it effectively engaged and represented ITERA students in electing their student president.

 Designing a web appearance using figma which contains student presidential election activities of the Sumatra Institute of Technolog

## **Practice Assistant Institut Teknologi Sumatera**

# 1.Laboratory Assistant for Human-Computer Interaction Course

Sept 2024 - Dec 2024

- Guided students in understanding fundamental principles of User Interface (UI) and User Experience (UX) design.
- Provided tutorials on using design tools like Figma, Adobe XD, or similar platforms to create interactive prototypes.
- Assisted students in analyzing and evaluating the usability of existing digital interfaces.
- Delivered hands-on sessions to teach wireframing, prototyping, and user testing methodologies.
- Facilitated group projects by mentoring teams in implementing effective UI/UX designs.
- Supported lecturers in conducting workshops and practical sessions on human-centered design approaches.
- Reviewed and provided constructive feedback on student UI/UX design assignments and projects.

#### 2. Computer & Software Practicum Assistant

Sept 2022 - Jul 2023

Assist lecturers in guiding and supporting learning activities such as answering questions, discussing with students, helping and overcoming obstacles encountered during practicum sessions.

- Make presentations related to practicum material such as processing data in excel & word, making
- flowcharts, and practicing the C++ programming language.
- Process and evaluate student assignments that require thoroughness in checking them

#### PT Perkebunan Nusantara I Regional 7

#### Information Technology System

Jun 2024 - Aug 2024

- Developed a Telegram chatbot integrated with the GEMINI API for human-like interactions.
- Analyzed system requirements and designed technical solutions.
- Built and developed the chatbot using Python and relevant libraries.
- Integrated the chatbot with the company's database for real-time data access.
- Processed raw data using SQL and visualized insights.
- Conducted testing to ensure accuracy, speed, and reliability.
- Enhanced chatbot performance by resolving bugs and optimizing backend connectivity.
- Provided data-driven recommendations to improve chatbot response quality.

#### **PPLK ITERA 2022**

#### Staff of Content Research at Implementation Technology Division

Jun 2022 - Aug 2022

PPLK is a welcoming event for new students. Content research is a division tasked with searching, analyzing and processing data/information for use on websites and applications

- Work with the team in finding and processing required data/information such as building information, campus information, majors & study program data, etc.
- Processing the information into information that is interesting and easily understood by readers.
- Input the information that has been obtained into the PPLK ITERA website

#### **PROJECTS**

#### My Portfolio Website - Personal Project

I created a professional online portfolio using HTML, CSS, and JavaScript, showcasing my biodata and experiences. The design emphasizes aesthetics and functionality, highlighting my skills in crafting user-friendly and visually appealing web solutions.

#### UI/UX Web Designer - CukaiPro Application

My team and I participated in the GEMASTIK 2024 competition, where we redesigned the Customs application and named it "CukaiPro" using Figma, incorporating advanced technologies such as Al and machine learning.

# Machine Learning Engineer - Classification and Prediction of British Broadcasting Corporation (BBC) News Categories

My team and I developed a BBC news classification model, applying Natural Language Processing (NLP) techniques to compare Recurrent Neural Network (RNN) and Naive Bayes Classifier for category prediction. Using TF-IDF for text representation and SVD for dimensionality reduction, we analyzed sequential relationships (RNN) and probabilistic patterns (Naive Bayes). This project highlights the effectiveness of NLP-based algorithms for automatic text classification, specifically on the BBC news dataset.

#### Machine Learning Engineer - Classification and prediction of Vegetable Types

My team and I developed a vegetable detection model for types such as potatoes, carrots, capsicum, and broccoli using digital image processing techniques (resize, normalize, augmentation, enhance contrast, grayscale) and deep learning methods with CNN architectures (CONV2D, Xception, VGG16). The dataset consisted of 400 images sourced from Kaggle, ensuring the model's ability to accurately recognize and classify vegetable types.

#### Machine Learning Engineer - Disease Diagnosis System Model

My team and I developed an expert system model for disease diagnosis that utilizes medical ontology and the Random Forest algorithm. This system is designed to improve disease diagnosis accuracy by integrating structured medical knowledge through ontology and machine learning algorithms.

#### **Machine Learning Engineer - Sentiment Analysis**

My team and I conducted sentiment analysis on the Pocket ITERA app, a student platform at the Sumatra Institute of Technology (ITERA) offering services like attendance, helpdesk, and ecounseling. Using NLP and Naive Bayes, I analyzed Google Playstore reviews to classify feedback into positive and negative sentiments, highlighting the app's strengths and areas for improvement. The results were visualized to provide actionable insights, helping developers enhance the app's quality and user experience.

#### SKILLS

- Microsoft Office (Word, Excel, PPT)
- Google Workspace (Gmail, GDocs, GSheets, GSlide, Gform)
- Database Tools (MySQL)
- Programming Language (C++, Python, PHP(basic))
- Front-End (HTML, CSS, JavaScript (basic))
- Data Visualization (Seaborn, Mathplotlib, Tableau, Figma, Canva)
- Analytics Data (Pandas, NumPy, Scikit-learn, Nextcloud)