

# ABE RANDA PUTRA

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## EDUCATION

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### DIPONEGORO UNIVERSITY

Bachelor of Computer Science

Semarang, ID

Expected Aug 2022

Cumulative GPA: 3.83/4.0; Local Government Scholarship 2018 - Present;

Relevant Coursework: Machine Learning; Database; Data Mining; Big Data; Information Retrieval; Object-Oriented Programming;

## EXPERIENCE

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### MSIB AI Microcredential

Semarang, ID

Associate Data Scientist - Participant

Nov 2021 – Dec 2021

- Complete all courses of associate data science microcredential from DIKTI (Direktorat Jenderal Pendidikan Tinggi/Directorate General of Higher Education)
- Built a final project about NLP (Natural Language Processing) model to predict the validity of a news using LSTM model
- Deployed the model project here

### SMKN 2 Teluk Kuantan

Pekanbaru, ID

Web Developer - Intern

Jan 2021 – Mar 2021

- Built a mail archive management information system website using Laravel 8 framework
- The project documentation is here

### Informatics Diponegoro University

Semarang, ID

Numerical Methods - Laboratory Assistant

Oct 2020 – Dec 2020

- Gave basic understanding of 6 topics numerical methods: Solution of Nonlinear Equation, Interpolation, Curve Fitting, Numerical Integration, Solving a System of Linear Equation with Gauss Method and Gauss Seidel Method, and Unconstrained Multivariate Optimization
- Evaluated 40 students assignments and gave feedback to improve numerical methods understand

## PROJECTS

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### HOAX DETECTION - MACHINE LEARNING MODEL

Dec 2021

- Built and collected dataset from data.go.id and turnbackhoax.id websites
- The data preprocessing stage consists of several stages as follows: case folding, tokenizing, removing stopwords, and stemming
- Built a machine learning model using the LSTM (Long Short-Term Memory) method to predict whether a news is a fake or not
- Utilized: Tensorflow, Keras, Natural Language Toolkit, TensorflowJs, Python, HTML, CSS

### FEATURE SELECTION OPTIMIZATION - EVOLUTIONARY ALGORITHMS PROJECT

Dec 2021

- Create code to solve the curse of dimensionality problems to improve performance prediction using particle swarm optimization method
- Successful to improve prediction accuracy by 6% compared to the model without using feature selection
- Utilized: Python

### SKIN CANCER DETECTION - MACHINE LEARNING MODEL

Aug 2021

- Trained a Neural Network classifier using 'Skin Cancer MNIST: HAM10000 dataset' with Keras and tensorflow
- The classifier successfully predicted the various types of diagnostic categories in the realm of pigmented lesion
- The highest accuracy obtained with the model was 98.48%
- Utilized: Tensorflow, Keras, Python, Pandas

## TEMPERATURE PREDICTION - MACHINE LEARNING MODEL

Aug 2021

- Used the energy data dataset from UCI and trained a Time series model using 'Keras' framework using LSTM (Long Short-Term Memory) Method
- The model was successfully able to build a system that can forecast temperature accurately based on a predetermined time frame
- Utilized: Tensorflow, Keras, Python, Pandas

## SIPAS - WEBSITE

Mar 2021

- Built a website that provides data management features for incoming and outgoing mail, as well as printing reports for incoming and outgoing mail
- This website was developed with the Waterfall process model with a Website-based Object Oriented Analysis and Design (OOAD) approach using the PHP programming language with the laravel framework and MySQL as database management.
- Utilized: PHP, JavaScript, HTML, CSS, Laravel 8, JQuery, Bootstrap, MySQL

## KoKeRu - WEBSITE

Dec 2020

- Built a website to assist building managers in controlling the cleanliness and tidiness of the building which is the responsibility of each Cleaning Service so that it can be run more efficiently without having to check directly in each room
- Utilized: PHP, JavaScript, HTML, CSS, Laravel 8, JQuery, Bootstrap, MySQL

## ACHIEVEMENTS

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Bronze Award | Mathematical Olympiad Open Contest

2021

## TECHNICAL SKILLS

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**Languages:** Advanced in Python, PHP, SQL, HTML/CSS; Proficient in JavaScript, C, C++

**Frameworks:** Tensorflow, Pandas, Keras, Scikit-learn, Numpy, Matplotlib, Seaborn, Laravel, TensorFlowJs

**Data Science Tools:** Git, Google Colaboratory, Jupyter Notebook, Pycharm, Excel

**Relevant Skills:** Web Development, Clean Code, SQL Databases, Data Visualization

**Certifications & Training:** Machine Learning Development (Dicoding), Basic Data Visualization (Dicoding), Cloud Practitioner Essentials (AWS)