CURRICULUM VITAE
Ivan Muhammad Siegfried, S.Si., M.Si.

Contact

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Personal

DoB: Cimahi, 12 Oktober 1994
Marital Status: Single
Religion: Islam
Language: Bahasa Indonesia,
        English (TOEFL 540).

Skill

- Cooperation
- Communication
- Creativity
- Innovation
- Time Management

Programming Language

- C
- Python
- Pascal
- VB.NET
- Java for Android
- Julia
- Matlab & Simulink

Tools

Ubuntu, Artificial Intelligence, Arduino, Raspberry Pi, Machine Learning, Deep Learning, Convolutional Neural Network, Web Scrapping, Natural Language Processing, NLTK, Git, SQLite, Pandas, Scikit-learn, Transfer Learning (Caffe Model), MobileNetV2, ResNet50V2, Xception, Tableu, dll.

Contact me at
tinyurl.com/waivan

ABOUT

Master graduate in Physics. I have a lot of experience in programming project, especially in Machine Learning, Computer Vision, Computational and Instrumentation Physics using various program such as Python, Matlab, VB.NET, etc. Currently learn about big data architechture platform using Hortonworks Data Platform.

Working Experience

DATA SCIENCE TRAINER (PART TIME)
PT Santai Berkualitas Syberindo / December 2020 - Now

- Responsible for providing assistance and education related to Python programming along with insight into data science for participants,
- Conduct an assessment related to assignments and exams given to participants.

RESEARCH AND DEVELOPMENT STAFF
CV Rahayu Mandiri / August 2019 - December 2020

- Responsible for creating and designing the latest technology products based on market needs,
- Perform price calculations along with taxes,
- Participate in developing applied technology that is useful for Indonesia.

INTERNSHIP
Kementerian PUPR / November 2019 - January 2020

- Responsible for creating a software interface between the Falling Weight Deflectometer and PC using VB.NET,
- Responsible for providing advice related to the microcontroller used in retrieving sensor data using the geophone.

LABORATORY ASSISTANT
Computational Physics Laboratory FMIPA Unpad / 2014 - 2016

- Responsible for responding to theory presentation carried out by the students,
- Responsible for helping students in making programs from existing algorithms,
- Responsible for assessing all performances that have been carried out by the students.

LABORATORY ASSISTANT
Experimental Physics Laboratory FMIPA Unpad / 2015 - 2016

- Responsible for responding to theory presentation carried out by the students,
- Responsible for helping students in performing the experiments
- Responsible for assessing all performances that have been carried out by the students.

Education

2017 - 2019 - Master in Physics (M.Si. Institut Teknologi Bandung)
2012 - 2016 - Bachelor in Physics (S.Si. Universitas Padjadjaran)

Course

January 2021 - The Ultimate Hands-on Hadoop: Tame your Big Data! (Udemy)
July 2020 - Python - Data Science (SanberCode)
August 2020 - Advanced Python - Data Science (SanberCode)
August 2020 - Fundamental of Data Visualization (Dicoding)
August 2020 - Beginner Machine Learning (Dicoding)
August 2020 - Programming with Python (Dicoding)

Publication and Research

Design of Non-Invasive Spectrophotometer for Measuring Blood Sugar Level
Proceeding Senfa 2015

Comparative Study of Deep Learning Methods in Detection Face Mask Utilization
OSF Preprints

Numerical Method using GNU Octave
E-Book

PORTFOLIO

Computational and Material Physics Projects:

- Uranium Decay Simulation U-235,
- Classic Race Car Mechanics,
- Pendulum Motion Simulation using the Euler, Euler-Cromer, and Verlet Methods,
- Simulation of 1 and 3 Dimensional Electromagnetic Waves,
- Monte-Carlo Simulation to Calculate the value of Pi,
- Random-Walk Method for Solving Mathematical Equations,
- Schrodinger's Equation Solution Program for Simulating the Energy Band System in Si, GaP, GaN, and TiO2 Rutile Using the Density Functional Theory Concept with Julia Programming (Inhouse Program) Compared to Open Source Programs (ABINIT),
- Properties of Materials using Quantum-Espresso (On-going Project).

Data Engineering Projects:

- Data Warehousing: Splitting Data using Talend and phpMyAdmin,
- Finding a Popular International Routes During a Range of Time and Sorting It Using Talend,
- Twitter Data Ingestion using Apache NiFi (Hortonworks Data Flow)
- Finding Oldest Popular Movies using Apache Pig (Hortonworks Data Platform),
- Finding Lowest Rate of Movies using Apache Spark SQL (Hortonworks Data Platform),
- Counting Words using Apache Flink (Hortonworks Data Platform),
- Publishing Some Data using Apache Kafka (Hortonworks Data Platform).

PORTFOLIO

Artificial Intelligence And Instrumentation Physics Projects:

- Vehicle Speed Detection using OpenCV,
- Face Recognition using Raspberry Pi and Artificial Intelligence Model,
- Detection of Police Number Plate Recognition using Raspberry Pi and Artificial Intelligence,
- Multi-platform Laboratory Administration Program using Radio-Frequency Identification and Visual Basic.NET Based Programs,
- Rapid Detection of Fire Presence Using Convolutional Neural Network Architecture and Transfer Learning using InceptionV3 Model,
- Making Ground Penetrating Radar (On-Going Project with *Direktorat Bina Teknik Jalan dan Jembatan Kemeterian PUPR*
- Assistance with Disabilities: Detection of Surrounding Objects using Deep Learning Assistance and Raspberry Pi (On-going Project).
- Image Recognition: Rock Paper Scissor using Convolutional Neural Network.

Data Science Projects:

- Loan Prediction using Logistic Regression Algorithm, Random-Forest Classification, and XGBoost,
- House Price in Boston Using the Regression Method,
- Recognition of Number Digits using Convolutional Neural Networks,
- Recognition of Facial Mask Images using ResNet50, MobileNetV2, and Xception Methods,
- Web Scraping from Wikipedia and Storing in a Database,
- Analysis of Twitter Conversation Sentiment About the Jouska Case,
- Analysis of Twitter Conversation Sentiment About the Minister of Health in July 2020,
- Sanbercode Final Project: Salary Prediction (Top 15 out of 420).