

Rafi Solichin

Software Engineer | Full Stack Developer | Software Architect Enthusiast

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SUMMARY

I am an experienced software developer with a strong focus on server-side application development. My expertise lies in designing, implementing, and maintaining the core logic, integrating database systems, and APIs that power the functionality of software applications. I have a deep understanding of programming languages using Python, Java, C#, Go and Javascript as well as frameworks and technologies commonly used in web development. As a software developer, I also have an understanding about app deployment and using docker as a main tool for containerization. I am looking for a new opportunity as a Software Developer or as a DevOps Engineer.

Tags

- Fullstack Developer
- Software Architect
- Trainer
- Java Spring
- C# .NET
- NodeJS
- Linux Server
- SQL
- No-SQL

EXPERIENCE

Software Engineer Associate

At PT. Ilab Solusi Pratama

May 2024 - Present

- Developed web applications for hospital clients using C# and the ASP.NET MVC framework.
- Maintained and optimized front-end JavaScript with jQuery and AJAX.
- Research and integrate third-party services such as SSO login with Google and payment gateways.
- Collaborated with the team to brainstorm and develop solutions for complex problems.

Architect - Backend Developer

Freelance - Client : Unisma Bekasi

Apr 2024 - Okt 2024

- Developing web application for managing employee payroll using node nest.js
- Brainstorming and gather requirement with client
- Calculating all employee income and deduction, including calculate based on education and year of service
- deploying app and database with docker to on premise server

Data Engineer

At Nawa data Solusindo

Sep 2023 - Mar 2024

- Collected and analyzed user requirements to ensure data solutions met business needs.
- Maintain and optimize SQL procedures based on user requests.
- Investigate data issues by identifying root causes and providing solutions to improve data integrity and system performance.

Backend Developer & Trainer

At Kodehive Technology & Academy

Sep 2022 - Sep 2023

- Develop server-side software using the required programming languages, primarily working with C# and the .NET framework.
- Build and maintain client-side mobile applications using Flutter.
- Deploy applications to servers, leveraging containerization with Docker as a primary tool.
- Continuously explore and adopt new technologies for application development, including the Microservices architecture and Redis for improved performance and scalability.

Trainer - Docker and Kubernetes fundamental

- At Trainocate* **Dec 2023**
- Deliver a base concept of containerization deployment and why it is popular lately
 - Explain and give an example of deploying an app using docker from app to image to container. Teach how to manage an image and container on docker
 - Explaining and give an implementation of managing container on kubernetes, how to auto scaling an container on kubernetes. Implements a network between apps inside kubernetes cluster.

Trainer - Mobile Apps Development with Flutter

- At Polytechnic Gajah Tunggal* **Dec 2022 - Feb 2023**
- As a trainer, I have responsibility to deliver the process of mobile apps development. Starting from the introduction of dart programming, creating user interfaces, layouts, navigation and routing, data management, state management such as riverpod, GetX and BLoC, networking, http requesting and how to CRUD to the server-side using Flutter.

Trainer - Oracle SQL Fundamental I

- At Trainocate* **Nov 2022**

Database Engineer

- At DSITD IPB University* **Jul - Aug 2021**
- SQL Data Transformation
 - Visualize a data and make a dashboard using Power BI
 - Decision Support System

Deep Learning Bootcamp

- Indonesia AI* **Aug - Sep 2021**

Machine Learning Path - Student

- Bangkit 2021* **Feb - Jul 2021**

STRENGTHS AND QUALIFICATIONS

TECHNOLOGY STACKS

- Programming [**Java, Python3, C#, Javascript, SQL, Dart, Bash**];
- Frameworks: [**Spring, Flask, .NET, Flutter, React**];
- Databases: [**Oracle, MySQL, PostgreSQL, Redis**];
- Additional : [**Linux environment, Docker container management**];

SOFT SKILLS

- | | |
|---|--|
| <ul style="list-style-type: none">• Critical Thinking• Continuous learning• Problem Solving | <ul style="list-style-type: none">• Teamwork• Communication |
|---|--|

EDUCATION

Java Backend Developer Bootcamp

- Kodehive Academy* **Jul - Aug 2022**
- Learn the development of software systems using java and spring as a framework. Includes data structures in java, object-oriented programming in Java, dependency injection, spring security, mvc and onion architectures. Focusing on server side development but also studying the client-side part such as html, css and ajax;

Bachelor of Computer Science

- IPB University* **Aug 2018 - Mei 2023**
- GPA 3.14/4.0

- **Relevant courses:** Data Structures, Object-Based System Development, Software Engineering, Databases Management, Data Mining, Information Retrieval, Artificial Intelligence, Smart System, Computer Vision.
- **Software Engineering:** Recognize, engineer and develop software starting from requirements analysis, design and modeling, to implementation using the program.
- **Object-Based System Development:** Studying object-based software development including objects, classes, encapsulation concepts, inheritance, polymorphism, and access modifiers. At the end of the course, we develop software based on objects.
- **Data Mining project:** Analysis of bank customer data to determine the pattern of customers who are actively paying debts and those who are not.
- **Information Retrieval project:** Create a classifier that can distinguish between spam emails and not.
- **Artificial Intelligence project:** Sudoku solver using backpropagation method, solve 1M problem without error.
- **Computer Vision project:** Machine learning apps that help to classify the species of snake based on their skin differences.

SMA PU Al Bayan

Jul 2015 - May 2018

ADDITIONAL EXPERIENCE AND VOLUNTEER

Head of Information and Media

Taekwondo IPB

Nov 2020 - Nov 2021

- Responsible to distribute all information from community to all member
- Responsible to all media information post

Staff of Media and Branding

BEM FMIPA IPB 2019-2020

Oct 2019 - Nov 2020

- Responsible to serving other divisions related to media and design

Head of Event Division

G-Family (Faculty Introduction Period)

Feb - Aug 2020

- Responsible for the entire schedule and series of programs

SELECTED PROJECTS

- **Snake Species Classification:** Using the Convolutional Neural Network, four types of snake species were classified. Feature extraction is done by convolution technique and classifier using simple Deep Learning architecture. Snake species were successfully classified with 85% accuracy.
- **Human Gender Classification:** This project aims to build a model that can recognize the gender of a person based on the characteristics that are different between male and female. using CNN deep learning and exception architecture, Model can classify with 82% accuracy.
- **Covid-19 Vaccine Sentiment Analysis:** A few months ago, Indonesian Twitter users were busy with opinions about the Covid-19 vaccine. Many people reveal their opinion about vaccines, and there are so many to check it one by one. I tried to build a Sentiment classifier and was successful with 64% accuracy .

OTHER PROJECTS

- **Sudoku Solver Using Backtracking Algorithm:** This project was created for the final assignment artificial intelligence course. We try to solve the constraint satisfaction problem in the sudoku game using the backtracking algorithm. In this project we compare the completion algorithms using backtracking and not. the result, by using backtracking the computational process becomes longer but there are no errors in the completion and without backtracking there are 367 errors out of 1 million sudoku problems.
- **Email Spam Filtering:** This project was created for the final assignment information retrieval course. We learn to classify emails which are spam and which are important using logistic regression. A lot of unimportant emails go into the inbox and we try to label the emails that are not important so they don't fill the incoming messages. As a result, we achieved a 96% accuracy in classifying spam emails.
- **Predicting Credit Risk Using K-Nearest Neighbor:** This is my final assignment data mining course. When the bank provides loans to customers, there are 2 possibilities, the customer will pay the loan or not. In this

project we try to classify which customers are good and which are not. We took the dataset from creditriskanalytics.net. What we do include: data exploration, visualization and preprocessing. Then make a model and evaluate it, we made it and reached 90% accuracy when predicting bank customers.

- **Natural Language Processing in Research Article:** By reading abstracts from articles or journals, we can usually find out the research area of the abstract. In this project, I tried to build a model that can give some research tags for each article based on an abstract. Using Recurrent Neural Network this model successfully predicts the right research tags with 81% accuracy.
- **Forest Fire Area Prediction:** This project is the final assignment of a deep learning course. In this one I use tensorflow framework and train a neural network deep learning to predict the fire area with a case study dataset from the UCI machine learning repository, this project has successfully created a model that can predict the fire area area but only has an accuracy of 61%.
- **Classify Cat and Panda Using InceptionV3 Architecture:** This is my final assignment of machine learning development course at dicoding. Using the Deep Learning InceptionV3 pre-trained model or usually called transfer learning, I load the previous model and retrain with cat and pandas dataset from kaggle. Pre-trained models are very over powered and the easiest way to make and train a computer vision model. In this project I reached an accuracy of 93%.

CERTIFICATION

Google IT Support - [click to view certificate](#)

Google - Coursera

22 Mar 2021

Gain skills required to succeed in an entry-level IT job. Learn to perform day-to-day IT support tasks including computer assembly, wireless networking, installing programs, and customer service. Learn how to provide end-to-end customer support, ranging from identifying problems to troubleshooting and debugging. Learn to use systems including Linux, Domain Name Systems, Command-Line Interface, and Binary Code.

Including 5 courses:

- The Bits and Bytes of Computer Networking
- Technical Support Fundamentals
- System Administration and IT Infrastructure Services
- IT Security: Defense against the digital dark arts
- Operating Systems and You: Becoming a Power User

Google IT Automation with Python - [click to view certificate](#)

Google - Coursera

21 Mar 2021

Automate tasks by writing Python scripts. Use Git and GitHub for version control. Manage IT resources at scale, both for physical machines and virtual machines in the cloud. Analyze real-world IT problems and implement the appropriate strategies to solve those problems.

Including 6 courses:

- Troubleshooting and Debugging Techniques
- Introduction to Git and GitHub
- Using Python to Interact with the Operating System
- Configuration Management and the Cloud
- Crash Course on Python
- Automating Real-World Tasks with Python

Mathematics for Machine Learning - [click to view certificate](#)

Imperial College London - Coursera

29 Mar 2021

This specialization aims to bridge that gap, getting you up to speed in the underlying mathematics, building an intuitive understanding, and relating it to Machine Learning and Data Science. In the first course on Linear Algebra we look at what linear algebra is and how it relates to data. The second course, Multivariate Calculus, builds on this to look at how to optimize fitting functions to get good fits to data. The third course, Dimensionality Reduction with Principal Component Analysis, uses the mathematics from the first two courses to compress high-dimensional data.

Including 3 courses:

- Linear Algebra
- Multivariate Calculus
- Principal Component Analysis

DeepLearning.AI TensorFlow Developer - [click to view certificate](#)

DeepLearning.AI - Coursera

18 Apr 2022

Best practices for TensorFlow, a popular open-source machine learning framework to train a neural network for a computer vision applications. Handle real-world image data and explore strategies to prevent overfitting, including augmentation and dropout. Build natural language processing systems using TensorFlow. Apply RNNs, GRUs, and LSTMs as you train them using text repositories.

Including 4 courses:

- Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning
- Convolutional Neural Networks in TensorFlow
- Natural Language Processing in TensorFlow
- Sequences, Time Series and Prediction