

Matthew Brandon Dani, Backend Engineer

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LINKS

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PROFILE

I am interested in cloud computing and backend web development. As an engineer (S1-Computer Engineering), i am a fast learner by following best practices from many knowledge sources, become highly skilled as good as theoretically. I'm passionate about quality code, security, performance, and explore something new.

I have been engaged to some projects, either university academic and private (freelancer). I have been a formal campus laboratory assistant and organizations member for years. Beside that, my owned business which service some clients, mostly in web development.

Those activities build my professional personalities : responsibility, customer-based, communicator, thinker, planner, idea generator, initiative, and collaborative.

I am certified on : Associate Cloud Engineer in Google Cloud and Alibaba Cloud (cloud computing system administration and architecture design)

I am skilled and adaptive on : most web programming languages & frameworks, algorithm & data structure (Object Oriented Programming), and computer networking.

Looking forward to join and serve your company, contribute my competencies for a long term cooperation.

EMPLOYMENT HISTORY

Aug 2022 — Dec 2022

Backend Engineer Intern, Traveloka

Had a awesome journey with the Traveloka Financial Services - Payment Team. Responsible for developing backend projects for optimizing and migrating payment out systems and microservices. Such as :

1. To create tooling microservice for safe database access.
2. To modify reporting microservice to add some features and functions (send data to AWS SQS).
3. To migrate bank transfer API to SNAP (Standar Nasional Open API Pembayaran) by create new microservice and do UAT (User Acceptance Testing) with bank partner.
4. To modify tracking microservice (send data to GCP BigQuery for data analytics).
5. To modify some microservices for centralizing data of microservices.
6. To ensure maximum code coverage by improving unit test in every new pull request.
7. To create technical documentation using various tools.

Working with Java Spring & Spring Boot, JsonRPC & REST API, PostgreSQL, AWS Infrastructure (including Terraform), and Professional Development Cycle (Agile).

I Did a lot of initiatives and propose some ideas in team collaboration to optimize the systems such as improving documentations, system planning, so on.

Feb 2022 — Jul 2022

Cloud Computing Path Student, Bangkit Academy 2022 led by Google, Tokopedia, Gojek, & Traveloka

I learned about a lot of cloud computing and web development, especially about web backend development using nodeJS, managing and deploying Google Cloud Platform, CI/CD with Docker, Jenkins, and Kubernetes, and a lot of soft skills such as collaborating with project partners, English courses, and professional communication.

Our instructors are industry experts and academics. In the end, I successfully build a diseases prediction app for the capstone project and got international Google Cloud Associate Cloud Engineer Certification.

Aug 2021 — Jul 2023

Laboratory Assistant, Universitas Multimedia Nusantara

Responsible for total 11 technology class with 7 unique subjects that Algorithm and Data structure Class (C language), Object Oriented Programming Class (Java Language), Mobile Programming Class (Kotlin Language), Intro to Internet Technology Class (Frontend Web Development with ReactJS), Intro to Multimedia Technology Class, Electronic Fundamentals Class, Image Processing Class (Python Machine Learning). My role:

1. Teach according to the curriculum contract and help student with their problems.
2. Discuss with lecturer about learning materials.
3. Make exam questions.
4. Score student exam and assignment.

May 2021 — Jul 2023

Freelance Web Development

Since 2021, i have total 7 clients such as Sahabat Pensiun, PT. Kawanadi Perkasa, and PT. Hartono Tirta Lestari, Wassen Detergent Cambodia, Summerland Films, CMCC 2021 Universitas Tarumanagara & Mahkamah Konstitusi Indonesia. With many successful project and satisfaction for web development. With this freelance job i have learned about wide web development technologies, problem solving that fits with client problem and technology requirement, documenting projects, and professional communication skill. My responsibilities:

1. Propose product specification that fits into client problem.
2. Mostly Fullstack web development including web frontend, backend, database, and deployment.
3. Create technical documentation for post-project.
4. Training and testing the application with client.

EDUCATION

Aug 2019 — Jun 2023

Bachelor Degree of Computer Engineering, Universitas Multimedia Nusantara

Jakarta

Graduate with Cumulative GPA: 3.89 / 4.00

Active in Laboratory Assistant, Training and Certifications, Association of Computer Engineering Students, UMN Robotic Club, UMN PC (competitive programming organization), and other campus activities. First Winner of Overclock Competition by Technofest 2019 with AMD Systems.

Final year project : Designing and Building DDoS Mitigation Distributed Proxy System Based on Machine Learning and Blockchain

Jul 2016 — May 2019

High School Science, SMA Kolese Loyola

Semarang

Active in many school activities, such as Moment Hunter #13 (Official School Documentation Organization), Temu Kolese 2018, etc

COURSES

Apr 2023

Associate Cloud Native, Alibaba Cloud

Mar 2023

Associate Cloud Security, Alibaba Cloud

Aug 2022

Associate Cloud Engineer, Google Cloud

Jun 2022

English Conversation Intermediate Class (With Predicate Satisfactory), LanguageTalk

13 online courses certification in cloud computing and backend web development, Coursera, Dicoding, and Google Cloud Skill Boost

SKILLS

Critical thinking and problem solving

Team work and collaboration

Skillful and adaptive in most web programming language (Java, Python, PHP, C, C++, Go, Kotlin)

Object Oriented Programming to support SOLID and clean architecture

Backend Web Development with demanding framework (Spring Boot, Laravel, ExpressJS, Flask, Gin)

Database development with SQL and NoSQL

Cloud System Administration (Linux based) and Infrastructure with GCP, Alibaba, and AWS
Code Collaboration using Git and Github

Technical Documentation

Skillful in other technologies such as Networking, Machine Learning, Blockchain, Distributed System, and IoT Development

ORGANIZATIONS

**Coordinator Research and Development,
Association of Computer Engineering Students
UMN GEN XII**

As coordinator of research and development, i have responsible to active giving workshop and tutorial for developing other people skills and leading several events for skill development as part of SDG (Sustainable Development Goals). My works such as holding ACES Labs for incubator of students research and project, ACES Open Project, ACES League for internal algorithm & technical competition, etc. I also take part to created ACES new official website for publication of student projects, and others.

**Public Relation, Association of Computer
Engineering Students UMN GEN XI**

My role is to content creation, handle social media, and communicate with external parties if want to collaborate with organization. With this role i can improved my communication skills because all forms of communication must be on target as intended.

**Leader, Introduction to Computer Engineering
Study Program 2021**

Hold an event for new students about college life at UMN's computer engineering study program. Such as providing initial knowledge about what will be studied in this study program and general knowledge about this study program. As chief committee I have the responsibility to ensure the event is on target and appropriate from planning the event, lead and managing people with diverse backgrounds and motivate to collaborate each other, and administrative report.

PROJECTS

**DDoS Mitigation Distributed Proxy System Based
on Machine Learning and Blockchain (2023)**

Achieve 'A' / Excellent score from thesis defense.

Building and designing a distributed proxy system to mitigate DDoS attack for final year projects. Create multithreaded and multiprocessing for multiclient reverse proxy for packet sniffer and high throughput firewall controller based on packet signature and firewall rules with python low level networking.

Comparing across 7 machine learning and deep learning algorithm such as Bidirectional LSTM, SVM, Naive Bayes, etc. Use consensus algorithm and blockchain based distributed database BigchainDB for distributing attacker identity for reducing time to mitigate (TTM).

This project is solo project so i must create full stack application such as proxy controller, firewall controller, machine learning models, dataset mining, backend as central control, distributed database, also frontend for admin panel.

Diseases Prediction (Bangkit Academy) (2022)

Application to predict disease based on symptoms. The application is made using machine learning and the dataset was taken from alodokter.com.

As cloud computing division, I made a main REST API application and admin panel using NodeJS, ExpressJS, MySQL, and ReactJS, Scraping App for dataset using Python, and deploying backend and machine learning app to Compute Engine GCP using docker, NGINX reverse proxy, and Gunicorn.

I learned about how to active collaborate with team, such as need to make concise and clear technical API documentation. The final result is a fully functional diseases prediction application.

Smart Waste Management System (2021)

IoT project that used LoRa network communication, HTTP API Backend, and MERN stack (MongoDB, ExpressJS, ReactJS, NodeJS). The target is to find the most effective route for picking up trash. I built the hardware and software for this project and tested in test environment. Final result is a fully functional project.