Thirza Ahmad Tsaqif

Jakarta, Indonesia | (+62)81290765711 | thirzahmad@gmail.com | Linkedin | Github | Website

Driven and self-motivated Information Systems student at the University of Indonesia with a passion for programming and design. A creative thinker with a strong work ethic, eager to tackle challenges and continuously enhance technical skills in innovative environments.

EDUCATIONAL BACKGROUND

Information System | Bachelor of Computer Science
University of Indonesia, Depok, Indonesia

September 2022 – Present

SMAN 109 Jakarta | Jakarta, Indonesia

 July 2019 – July 2022

EXPERIENCES

Teaching Assistant of Data Structures and Algorithms
Faculty of Computer Science, Universitas Indonesia

September 2024 –December 2024

- Created lab assignments related to Linked Lists, ensuring minimal revisions during student execution.
- Designed programming tasks related to Graphs, achieving minimal revisions during student work.
- Provided assistance to students before midterms (UTS) and final exams (UAS).
- Conducted programming task demonstrations, providing feedback on peer students' code and engaging in Q&A sessions to clarify assignment details.

Developer Staff, Multimedia Department
BEM Universitas Indonesia

March 2024 – December 2024

BEM Universitas is an University organization to accomodate student interests.

- Development and Responsible for the BEM UI Integrated Information Systems (SIT) website, leveraging Django Python for a robust backend and crafting a responsive frontend with HTML and CSS.
- Developed and maintained the BEM UI Integrated Information Systems (SIT) website, utilizing Firebase for authentication and database management.
- Deployed the SIT system on Railway and Firebase, ensuring high availability and scalability.
- Developed a LINE Messaging API (LINE bot) for mail and publication, enabling staff to access features directly from the LINE app, improving communication and accessibility.

Backend Staff
BEM Faculty of Computer Science UI

March 2023 – December 2023

BEM Fasilkom is an Organization inside the Faculty to accommodate student interests.

- Maintained and updated the backend of the BEM Fasilkom UI website to ensure code stability and reliability, supporting all BEM Faculty staff and students.
- Built and implemented new models based on the redesigned website, improving user experience and functionality, utilizing Django Python and Go.
- Developed APIs according to established API contracts, ensuring seamless integration with other systems with tested and developed with Postman.
- Adhered to GitHub and organizational coding standards, ensuring clean, maintainable code.
- Developed and maintained critical modules like LPJ Online, Best Staff, Scholarship, and Recruitment websites, enhancing organizational efficiency and student engagement.

Mentor
DDP – O
Juny 2023 – July 2023
DDP-O is an mentoring event to introduce code and faculty to new students.
- Facilitated a mentoring program aimed at introducing first-year students to coding and faculty resources.
- Provided foundational Python programming instruction to new students, enhancing their initial learning experience.

Visual Design Staff
DDP – O
Juny 2023 – July 2023
DDP-O is an mentoring event to introduce code and faculty to new students.
- Developed comprehensive and visually engaging presentation materials used for learning sessions using Figma.
- Created dynamic and informative feed designs to promote event schedules, updates, and key information using Figma.

Visual Design Staff
PERAK
March 2023 – September 2023
PERAK is a sports events within the faculty to support sports interest in students.
- Designed visually appealing posters to promote sports competitions.
- Adapted designs for various formats including Instagram feed, row format, traditional posters, Line, and Facebook posts.
- Maintained open communication with the team to ensure alignment with event goals and branding guidelines.

PROJECTS

Integrated Information Systems (SIT) BEM UI
- Developed and maintained a comprehensive website that managed BEM UI's affairs—social media publications, financial processes (reimbursement and income/expenditure), and partnership/sponsorship documentation—improving operational efficiency.
- Implemented the system using the Django Framework with Firebase, streamlining functionality and authentication processes, resulting in a 30% enhancement in user access speed and security.
- Developed and maintained a LINE Messaging API to facilitate organizational mail and publication tasks, reducing communication delays and enabling direct access to features, benefiting over 200 active users.

Open Recruitment Website API | BEM Fasilkom UI
- Developed a recruitment website for selecting the next term's BEM Fasilkom UI members.
- Built using Go with the Gin framework and PostgreSQL.
- Using PostgreSQL
- adhere to API Documentation and contract to increasing integration with Frontend

API LPJ Online | BEM Fasilkom UI
- Developed a robust website API to manage programs and reports for BEM Fasilkom UI, reducing manual processing time by 40% and increasing data accessibility for over 200 users.
- Utilized Django REST Framework and PostgreSQL, enhancing data handling efficiency and scalability, and achieving a query response time improvement
- Ensured strict adherence to the API Contract, resulting in a seamless integration with existing systems and a 100% compatibility rate to Frontend application.
- Implemented SonarQube for continuous code quality monitoring.

ChattyDesk | Dev Challenge Submission
- Developed a cross-platform desktop application enabling seamless multi-LLM chat.
- Backend involved designing and deploying a scalable API using Django REST Framework, Python, and PostgreSQL, hosted on Digital Ocean.
- Frontend was built with Electron, React, and TypeScript, ensuring a smooth user experience across different LLM models.

Best Staff Voting Website API | BEM Fasilkom UI
- Designed a website for staff voting to recognize the Best Staff among BEM Fasilkom UI members.
- Developed using Django REST Framework for robust API functionality.
- Ensured adherence to comprehensive API Documentation and contract standards, resulting in streamlined integration with the frontend.

Knowlxcircle Application | Gemini API Developer Competition Submission
- Designed and developed Knowlxcircle, a versatile crowdsourced learning platform, enhancing collaborative learning circles
- Integrating Google Generative AI with the Application as a Automatic Article Creator and Chatbot
- Implemented the backend API using Django REST Framework and PostgreSQL, achieving a data retrieval speed improvement of 40% and handling over 10,000 requests daily with 99.9% uptime.
- Built a modern web interface using TypeScript and Tailwind CSS.
- Deployed the backend on Azure Cloud Services and the frontend on Vercel, Improvement in application scalability and load time, ensuring a swift and reliable user experience.

Gemini Japanese | MLH GWH Submission
- Developed a Japanese translation application that provides users with both romaji and translations by integrating the Gemini AI API, increasing translation accuracy with any japanese format.
- Utilized React with TypeScript for the frontend to create a dynamic and intuitive user interface,
- Implemented the backend using a TypeScript server, ensuring efficient data processing. Utilizing AWS Amplify as deployment platiform.

Canva Copywriting Extensions | Canva Integration Apps Hackaton Submission
- Developed an innovative Canva extension leveraging AI algorithms to assist users in generating high-quality copywriting
- Created a Canva Extensions using Gemini AI that will create Copywriting for design and using Typescript

LiteralStoryboard | AWS Game Builder Hackaton Submission
- Created a game website that combine boards game and story.
- Developed using Vite React Typescript and Tailwind CSS and utilizing Gemini API and

Recipe Recommender | RAG 'n' ROLL Amp up Search with Snowflake & Mistral Submission
- Created a website that will recommend 5 food recipes based on user time.
- Using Cookpad as data source with Scrapping and utilizing Streamlit as front-end.
- Utilizing RAG and Snowflake Cortex Search and Using Mistral AI as the AI backbone for the website.

TECHNICAL SKILLS

Python :
- Earned multiple certificates including FreeCodeCamp's Python, Scientific Computing with Python, Data Analysis, Machine Learning and College Algebra with Python. Additionally, obtained Python Essential 1 and 2 certifications from Cisco Skills for All. Achieved Gold level on HackerRank.
- Developed backend systems for BEM Fasilkom UI using Django. Using Django Python for develop BEM UI Integrated Information Systems (SIT).
- Demonstrated backend development expertise by implementing Django in personal projects like JobList, HowtoInstallCode, and Knowlxcircle, delivering robust and scalable solutions.

Go :
- Leveraged Go with PostgreSQL to create a robust recruitment website for BEM Fasilkom UI, demonstrating efficiency and scalability.

SQL :
- Utilized PostgreSQL for BEM Fasilkom UI's website and excelled in the final project of the Database course.
- Solved 50 SQL challenges on LeetCode, highlighting problem-solving skills and SQL expertise.

Javascript :
- Earned the Full Stack Open Certificate, utilizing MongoDB and Express for backend development and React Javascript and tailwind for frontend development demonstrating full-stack proficiency.
- Completed JavaScript Essential 1 and 2 courses from Cisco Skills for All, solidifying foundational and advanced JavaScript skills.
- Achieved FreeCodeCamp's Backend and API certificate by using Express and MongoDB , showcasing expertise in building APIs and server-side applications.
- Achieved FreeCodeCamp certificates in JavaScript Algorithms and Data Structures, Front End Development Libraries using React.js, and Data Visualization using D3.

Firebase :
- Implemented Firebase authentication and database solutions for BEM UI Integrated Information Systems, enhancing user management and data security.

MongoDB :
- Demonstrated proficiency in NoSQL databases by implementing MongoDB (Mongoose) for projects from both the Full Stack Open and FreeCodeCamp courses.

CI/CD :
- Mastered continuous integration and continuous deployment practices using GitHub Actions for university courses and the Full Stack Open course.
- Deployed APIs and websites on platforms like Railway, Domcloud, Microsoft Azure, and Cloudflare, ensuring reliable and scalable deployment solutions.

Typescript :
- Earned the Full Stack Open Typescript Certificate, utilizing MongoDB and Express for backend development and React Typescript and tailwind demonstrating full-stack proficiency.

Flutter :
- Acquiring Flutter framework and Dart knowledge through university courses and self-study using the Flutter Apprentice (2nd edition), Flutter for Dummies, and Flutter Projects books.
- Developed various Flutter projects, including a Movie API application, a Result Summary component design from Frontend Mentor, and a book library application featuring authentication and API consumption, showcasing a strong understanding of cross-platform mobile app development.

TECHNICAL SKILLS

C# :
- Earned Foundational C# certificates from Microsoft and FreeCodeCamp, demonstrating a solid understanding of C# fundamentals.
- Followed a C# Unity course on YouTube, developing a simple game to apply learned concepts and build practical skills in game development.

Java :
- Achieved Gold level on HackerRank and solved over 100 problems on LeetCode using Java, demonstrating advanced problem-solving skills and proficiency in Java programming.
- Developed multiple Android apps based on Frontend Mentor designs, including Intro Section with Dropdown Navigation, Agency Landing Page, Loopstudios Landing Page, Room Homepage, Easybank Landing Page, URL Shortening API Landing Page, Bookmark Landing Page, and REST Countries API.
- Earned Java Certification from Hackerrank.

Blender :
- Created over 14+ 3D models and achieved 294 reputation on CGTrader.

English :
- EPT UI Score: Achieved a commendable score in English Proficiency Test (EPT) UI, demonstrating proficiency in both spoken and written English.
- C1 Advanced Certificate: Earned the prestigious C1 Advanced Certificate from EF, showcasing advanced language skills and proficiency.
- English for IT 1 and 2: Completed specialized courses in English for IT 1 and 2 (B1 and B2) from Cisco Skills for All, focusing on technical language proficiency and communication in the IT field

Figma :
- Utilized Figma to create innovative designs and user experiences while volunteering across multiple organizations, contributing to a wide range of impactful projects.

SOFT SKILLS

- Time Management : ability to use time wisely and efficiently.
- Collaboration : ability to work effectively in a group.
- Ability to work independently.