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EXPERIENCE IN INFORMATION & TECHNOLOGY

2025

SOFTWARE ENGINEERING PROJECT COURSE

Sleman, Yogyakarta

5th Semester Course – Project Manager

- Led a **35-member** cross-functional class project to develop a “**Sistem Keuangan Desa**”, coordinating five development teams, Backend Architects, and Business Analysts.
- Defined the overall project timeline, milestones, and sprint goals.
- Facilitated Agile development through **weekly sprint meetings**, real-time communication via **Whatsapp and Google Workspace**.
- Managed task tracking and documentation using **Notion, Linear, and Google Workspace**, while overseeing repository organization and code delivery on **GitHub**.
- Ensured smooth knowledge transfer and accountability across all development teams.
- Addressed major project challenges involving scope changes, communication gaps, and skill disparities through good planning and adaptive leadership.

2025

SOFTWARE ENGINEERING & DATA LABORATORY 2025

Sleman, Yogyakarta

Research Project

- Implemented a **Multi-Agent RAG system** using **LangChain, ChatOpenAI**, and three graph-based backends: **Neo4j (Cypher)**, **Neo4j + Vector Search**, and **GraphDB (SPARQL using Virtuoso)**.
- Designed an evaluation pipeline comparing each agent's response accuracy on 5 cybersecurity queries, using **MITRE ATT&CK** as ground truth reference
- Contributed to a research paper accepted for publication at the RAGE Workshop, **International Semantic Web Conference (ISWC) 2025**, to be presented in Nara, Japan (Nov 2–6, 2025).

Community Engagement MTA Gunung Kidul

- Designed and deployed a **Looker Studio dashboard** to visualize attendance data across **14 MTA branches**.
- Integrated the dashboard with **Google Sheets** to display real-time attendance from **Google Forms**.
- Introduced **data visualization concepts** to non-technical community stakeholders.

2025

FINALIST GEMASTIK COMPETITION 2025

Sleman, Yogyakarta

Smart Device, Embedded System & IoT – Fullstack Web Dev & Cloud Engineer

- Built an intelligent “knalpot brong detection system” integrating IoT sensors, embedded devices, and cloud-based automation.
- Engineered the fullstack web platform using **React.js (Vite)** and **TailwindCSS**, enabling real-time monitoring.
- Developed and deployed backend infrastructure on **Firebase and Google Cloud**, leveraging **Cloud Functions, Firestore**, and **Cloud Storage** for event-driven video processing and data management.
- Integrated an ML-powered license plate extraction model via **Google Cloud Run**.
- Designed seamless communication between SBC devices (Raspberry Pi) and cloud services.
- Facilitating automatic upload and trigger-based (event-based) data flow.
- Collaborated within a 3-member multidisciplinary team covering IoT hardware, ML modeling, and cloud software.

2025

GELANGGANG EXPO UGM 2025

Sleman, Yogyakarta

IT Division – Frontend Web Developer

- Built the **Geleverse mini-game** and an interactive “UKM Apakah Aku?” quiz page using **Next.js, TypeScript, React**, and **Tailwind CSS**, architecting all UI as modular, reusable components.
- **Framer Motion** animations library is used for smooth state transitions between quiz questions and results.
- Optimized asset delivery by converting images to **WebP** and applied **React hooks** (useMemo, useCallback) to improve load performance.
- Collaborated closely with UI/UX designers (Figma) and other Frontend teammate, managing code via **GitHub** and a **Agile** workflow to ensure on-time feature delivery.

2025

GOOGLE DEVELOPER GROUP ON CAMPUS (GDGOC) 2025

Sleman, Yogyakarta

Hacker (Fullstack Developer)

- Participated in a 6-month community development program focused on fullstack web engineering and collaborative coding practices.
- Built a complete **Expense Tracker App** as a mini-project, designing ERD, implementing authentication via **Clerk**, and deploying a fully functional frontend-backend system.
- Developed over 80% of features for a **Health Tracker Web Platform** for diabetes monitoring, including homepage, article listing, input forms, and time-series data visualization.
- Translated UI/UX designs into responsive interfaces using **Next.js 14**, **TailwindCSS**, and **Shaden UI**.
- Containerized and deployed the fullstack project using **Docker**.
- Collaborated within a 4-member cross-disciplinary team (BA, Fullstack, UI/UX, ML Engineer).

2024-Present **OMAHTI**

Sleman, Yogyakarta

Head of Research and Competition Managerial Division (2025)

- Led a 4-member division responsible for managing research, competition, and internship information channels within the organization.
- Established dedicated communication groups for competitions, workshops, interns, and research initiatives.
- Coordinated the publication of **OTICamp**, a recognition initiative highlighting internal competition achievements, in collaboration with the Content and Design division.
- Supported the mentoring process for **GEMASTIK** competition participants, helping prepare teams for national-level challenges.

Teaching Assistant Software Engineer at OmahTI Academy Event (2025)

- Co-led an 8-day Software Engineering bootcamp for 30 participants, delivering 5 teaching sessions and 1 consultation day focused on backend fundamentals and real-world project implementation.
- Taught key engineering concepts including **SDLC**, version control with **Git & GitHub**, authentication using **sessions and Redis**, and database interaction via **Prisma ORM**.
- Designed and presented structured live coding sessions using **Next.js**, **TypeScript**, and **Docker**.
- Provided one-on-one mentoring and troubleshooting support during and after sessions to help students overcome technical challenges and solidify understanding.
- Evaluated and reviewed participants' final projects, giving constructive feedback.

Instructor Class Web Developer at OmahTI Academy Event (2025)

- Designed and delivered a **6-day, 12-hour** Web Developer bootcamp for **30** participants, covering HTML5 semantics, CSS fundamentals, JavaScript & DOM, and React.
- Authored **4 comprehensive modules** (>200 pages) on HTML, CSS, JavaScript, and React concepts.
- Led interactive live-coding sessions via **Zoom**, guiding students through building a complete React-Tailwind to-do app and portfolio project.
- Delivered targeted Q&A support, resolving 6+ individual queries and fostering peer discussion in a dedicated group.

2024

MALPRES MIPA 2024

Sleman, Yogyakarta

IT Division – Frontend Web Developer

- Developed and deployed the **Next.js** landing page and nomination/voting platform, handling deployment and custom domain setup.
- Built an interactive nomination list with **Google Sheets API** integration, enabling **469+ FMIPA members** to cast votes seamlessly.
- Collaborated with UI/UX designer and backend engineer using **GitHub** and **Figma**, aligning design and data flow for a cohesive product.

EDUCATION

2023-Present **UNIVERSITY OF GADJAH MADA**

Sleman, Yogyakarta

Undergraduate Computer Science Student, GPA 3.83/4.0

- Relevant coursework: Software Engineering Methods; Scalable Software Development; Software Design Implementation Workshop; Cloud Computing; Databases; Algorithms & Data Structures; Web Semantics; Blockchain; Information Retrieval; Cryptography and Information Security; System and Cyber Security; Software Engineering Project

COURSES

THE WEB DEVELOPER BOOTCAMP

74 Hours, Udemy – Colt Steele

- Certificate No: UC-3510ecac-63fb-428e-8706-3ed76fe951f8

[PAKET ALL-IN-ONE] – PENGUSAAN PENGEMBANGAN WEB BACKEND: 7 PROYEK DENGAN JAVA/SPRING

38/60 Hours, Udemy – Ganis Zulfa Santoso, Elan Qisthi, Dery Rahman Ahaddienata

- Certificate No: <inprogress>
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OTHERS

Languages	Indonesian (Native), English (Okay)
Programming Languages	JavaScript, TypeScript, Java, Python
Frontend Tech	React.js, Next.js, TailwindCSS, Shadcn-ui, Zustand, Tanstack Query, Zod
Backend Tech	Springboot, Node.js, Express.js, FastAPI, PostgreSQL, MySQL, Flyway, PrismaORM, Alembic, Neo4J, GraphDB, Docker
QA Tech	JUnit, Jest, Mockito
Cloud Tech	Google Cloud Platform: Cloud Run, Compute Engine, App Engine, Cloud Run Function, Firebase
Others Tech	Github, Linear, Notion, Google Workspace, LaTex, DBeaver, Docker Desktop
Domains	Software Engineering, Knowledge Graph