

# SYIFA KAFFA BILLAH

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Syifa is a final-year Computer Science student at the University of Indonesia with a strong interest in full-stack development and data science. She has experience delivering real-world applications for institutional clients and aims to build impactful solutions as a Software Engineer.

## EDUCATION

**University of Indonesia, Faculty of Computer Science**

*Bachelor in Computer Science, GPA: 3.68 / 4.00*

Relevant Coursework: Software Engineering, Database Systems, Machine Learning

**Depok  
2022 - Present**

## TECHNICAL SKILLS

**Programming Languages:** Java, Python, SQL, JavaScript, CSS, HTML, TypeScript

**Database:** PostgreSQL, Supabase

**Framework:** Django, Spring Boot, Next.js, Flutter, Vue

**Tools:** Git/GitHub/GitLab, Visual Studio Code, SonarCloud, Postman, Microsoft Office

**Design:** Figma, Draw.io

## EXPERIENCE

**Pusat Administrasi UI, Frontend Engineer Intern**

**February 2025 - Present**

- Developed the frontend systems for the graduation and parking platforms using Vue.js and TypeScript.
- Built core features such as registration flows, role-based access control, parking subscriptions, and dynamic reporting.
- Integrated frontend with RESTful APIs and implemented route protection using role-based access middleware
- Designed UI mockups and user flows using Figma to align with responsive and component-based development.

## PROJECT EXPERIENCE

### DATA SCIENCE PROJECTS

**Lodging Reservation Analytics, Data Scientist**

**March 2024 - June 2024**

- Collaborated in 3-member data science team to deliver comprehensive analytics solution, providing actionable business insights that improved hospitality industry decision-making.
- Developed ML classification model (F1: 0.84) for booking cancellation prediction and regression model for pricing optimization using 8,954+ reservation records.
- Implemented customer segmentation through clustering analysis to identify distinct booking patterns and enable targeted business strategies.
- **Technologies:** Python, pandas, numpy, matplotlib, seaborn, sklearn, Google Colab

**Mario Detection in Video, Computer Vision Engineer**

**November 2024 - December 2024**

- Developed a real-time video analysis system to detect Mario characters using the YOLOv5 deep learning model.
- Designed the pipeline to process MP4 files, achieving 89% accuracy, 100% recall, and average IoU of 0.9023 in stable conditions.
- The system successfully handled challenging scenarios such as lighting variations and object rotation.

### SOFTWARE DEVELOPMENT PROJECTS

**Wisuda UI, Frontend Engineer**

**February 2025 - Present**

- Designed UI mockups for the graduation system using Figma.
- Developed the frontend using Vue.js and TypeScript, including features like registration forms, admin dashboards, and dynamic reports.
- Implemented role-based access control using meta routes and integrated with Keycloak.
- Integrated frontend with REST APIs and deployed the system to the DSTI development server.

**Parkir UI, Frontend Engineer**

**February 2025 - Present**

- Built the frontend system using Vue.js and TypeScript with personalized interfaces for users, admins, and verifiers.
- Developed features such as vehicle management, parking subscription, role-based navigation, and master data reporting.
- Implemented protected routing and role validation through page meta configuration integrated with Keycloak.
- Collaborated with backend teams for REST API integration and supported deployment to the DSTI development server.

#### **Second Treasure, Fullstack Engineer**

**March 2024 - May 2024**

- Responsible for the CRUD Sell Feature and Order Management, handling end-to-end development as a Fullstack Engineer.
- Utilized Next.js for frontend development and Spring Boot for backend implementation.
- Deployed the platform on Google Cloud Platform with SonarCloud integrated into CI/CD pipelines via GitHub for automated deployment, bug detection, code smell analysis, code security checks, and test coverage monitoring.

#### **IAST Connect, Backend and Frontend Engineer**

**June 2024 - July 2024**

- Led backend development, including organizing technical documentation and building the backend system using Django.
- Developed CRUD functionality for admin content management and implemented the home page interface using Next.js and Tailwind CSS.
- Played a key role in both backend and frontend engineering to deliver a seamless and efficient platform.

#### **ReadHub, Backend and Frontend Engineer**

**October 2023 - December 2023**

- Developed both web and mobile versions of ReadHub with optimized UI for responsive and mobile-friendly experiences.
- Implemented key features including category browsing, search functionality, favorites management, and seamless navigation.
- Utilized Django for backend development, and Flutter (Dart) and Bootstrap CSS for frontend implementation.

#### **Marmut Music, Backend and Frontend Engineer**

**March 2024 - May 2024**

- Modeled the system architecture using ERD and class diagrams, and implemented the backend with Django utilizing SQL for efficient data management.
- Created a responsive and interactive frontend using JavaScript and HTML to enhance user experience.

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### **ADDITIONAL EXPERIENCE**

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#### **TEACHING EXPERIENCE**

##### **Faculty of Computer Science, University of Indonesia**

**August 2023 - June 2025**

*Teaching Assistant (Discrete Mathematics 2, Calculus 1, and Numerical Analysis), Contract Employee*

- Assisted 10+ students per semester in understanding course content and solving complex problems.
- Created challenging problem sets for homework and quizzes, ensuring a high level of analytical thinking.
- Supervised quizzes, facilitated class discussions, recorded participation points, and managed student administrative records efficiently.

#### **ORGANIZATIONAL/VOLUNTEERING EXPERIENCE**

##### **Forum Ukhuwah dan Kajian Islam Fasilkom UI, Internal Control Staf**

**January 2025 - Present**

- Coordinated bidding process (fit and proper test) for Executive Board positions and SIWAK NG committee.
- Managed stakeholder communication between bidders and panelists while serving as MC and timekeeper during evaluation sessions.
- Ensured objective and orderly selection process through systematic procedural oversight.

##### **Forum Ukhuwah dan Kajian Islam Fasilkom UI, Human Resource Development Staff**

**August 2023 - January 2024**

- Executed human resource development programs to enhance organizational capacity and member engagement.
- Led "Remember Your Friend" (RYF) initiative, improving cross-functional collaboration and member networking.

##### **SIWAK-NG, Secretary**

**August 2023 - December 2023**

- Prepared proposals, activity reports, and official correspondence to support organizational events.