

Satria Nur Saputro

Backend Engineer

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Summary

Accomplished Backend Engineer with over one year of experience in designing and optimizing scalable systems. Proven expertise in enhancing system performance, reducing storage costs, and automating workflows using Golang and cloud-based technologies. Skilled in microservices architecture, large-scale data migration, and ensuring cross-platform data consistency. Dedicated to driving innovation and operational excellence through advanced backend engineering within dynamic, collaborative teams.

EXPERIENCES

August 2024 – Present (Jakarta)

BACKEND ENGINEER OFFICER, PT. SINAR MITRA SEPADAN (Orix Group)

- Designed and optimized core functionalities of the SMS financial application in collaboration with cross-functional teams, using REST API and microservices using Golang, integrating internal and third-party systems to enhance scalability and maintainability.
- Redesigned API to migrate base64-encoded files from SQL database to Google Cloud Storage, reducing storage usage by up to 20% and increasing system processing speed by over 15%.
- Migrated and aligned over 1 million third-party loan records from 2020 onward into the local database domain, resolving inconsistencies and ensuring reliable data updates on a daily basis to support critical operations.
- Built a scheduled automation system to process third-party (AI Rudder) audio files and generate Excel reports, uploading them to Google Cloud Storage, eliminating manual workflows, and accelerating reporting timelines.
- Developed and integrated a WhatsApp-based notification system in collaboration with Verihubs and Yellow.ai, providing a real-time, scalable, and secure alternative to email-based notifications, reducing notification delivery time and improving operational efficiency by automating client interactions.
- Implemented security measures to protect sensitive financial data and ensure compliance with industry standards across all integrations and API endpoints.

August 2023 – August 2024 (Jakarta)

BACKEND DEVELOPER OFFICER, PT. SATKOMINDO MEDIYASA (subsidiary BRI)

- Engineered core lending features for the NDS BRI application in collaboration with cross-functional teams, using Golang with REST API, gRPC API, microservices, and nanoservices, integrating internal systems and Core Banking to ensure scalability, robustness, and efficiency while ensuring compliance with the company's security regulatory standards.
- Developed a cronjob scheduler to automate data fetching and transmission via FTP, trigger Message Broker actions, and manage housekeeping tasks, ensuring reliable and timely execution of critical feature scenarios.
- Optimized MySQL performance by integrating Redis, reducing connection timeouts by up to 40% and improving backend responsiveness under high-load conditions.

- Developed unit and integration tests for APIs, achieving up to 85% code coverage and validating performance under load tests with 100 users and 1000 concurrent requests.
- Designed and implemented a custom validation and utility library to eliminate duplication across multiple repositories, ensuring data consistency and providing clear, actionable insights for the development team.
- Integrated Jaeger and ELK stack with application APIs and cronjob workflows to monitor system-wide performance and troubleshoot latency, ensuring high availability and operational stability.

May 2023 – July 2023 (Jakarta)

BACKEND DEVELOPER, IT INTERN BOOTCAMP BRI X DIBIMBING

- Designed and implemented a feedback feature for the NDS system, utilizing nanoservices within a microservices architecture and a gRPC API, ensuring robust and seamless functionality across all BRI branch units in Indonesia.
- Integrated SQL and Redis into backend development projects to optimize data management, enhancing performance and scalability.
- Developed and enforced validation logic tailored to the requirements of the feedback feature, improving data integrity and user experience.
- Integrated Jaeger for distributed tracing, enabling efficient monitoring and debugging of microservices interactions, contributing to system reliability and performance optimization.
- Participated in an intensive 2-week bootcamp under expert mentorship, mastering advanced backend development techniques, industry best practices, and modern tools to accelerate professional growth.

EDUCATION

September 2019 – March 2023 (Central Java, Purwokerto)

(GPA 3,94)

BACHELOR OF INFORMATICS ENGINEERING, TELKOM PURWOKERTO INSTITUTE OF TECHNOLOGY

- Earned a Bachelor's degree in Informatics Engineering with a strong academic foundation in web development, system implementation, database design, and machine learning, consistently achieving A grades in core subjects.
- Authored and published two peer-reviewed academic journals in the field of computer vision and natural language processing contributing valuable insights and advancements to the discipline.
- Participated in the "Kampus Merdeka" Program under the MSIB initiative, successfully completing a rigorous bootcamp with an A grade, demonstrating proficiency in applied technical skills.
- Completed the "AI Mastery" Course at Orbit Future Academy, earning an A grade, further enhancing expertise in artificial intelligence and its practical applications.

February 2022 – July 2022 (Jakarta)

BOOTCAMP ARTIFICIAL INTELLIGENCE MASTERY PROGRAM, ORBIT FUTURE ACADEMY (MSIB)

- Gained hands-on expertise in data science, computer vision, natural language processing (NLP), and reinforcement learning through an intensive bootcamp curriculum.
- Collaborated on the "Employee Feedback Analysis Using Face Recognition and BERT-based Website" project, integrating advanced technologies to analyze employee sentiment and deliver actionable insights into workplace dynamics.
- Built a computer vision module using the Face Recognition library to accurately identify employees from video inputs.

- Utilized the FFmpeg library to efficiently extract audio from video files, enabling seamless data preprocessing for analysis.
- Integrated a Flask-based backend with a BERT NLP model to process and classify sentiment data, enhancing system functionality.
- Developed an automated Excel reporting feature to categorize employee feedback into key sentiment groups—happy, neutral, and sad—streamlining data analysis and supporting data-driven decision-making.

SKILLS

Programming Language: Golang, JavaScript, Python.

Database: MySQL, Postgres-SQL, Redis, Rabbit-MQ, MongoDB.

Storage: Google Cloud Storage, MinIO Enterprise Object Store, FTP.

Delivery Platform: Docker, Liquibase, Red Hat OpenShift Container Platform, Atlassian Bamboo, Jenkins.

Monitoring: Jaeger, Kibana, SonarQube, Grafana, Prometheus, Open Telemetry.

Other: Linux, Git, Bitbucket, GitHub, Agile Methodologies, Jira, Confluence, Trello, Notion.

Language: Indonesian (*native*), English.

Soft Skill: Initiator, Innovative Thinker, Achieve Goals, Adept at Problem-Solving, Dependable and Trustworthy, Highly Professional, Meticulously Organized, Expert in Time Management, Collaborative Team Player, Quick and Effective Learner, Deeply Committed, Highly Motivated.

CERTIFICATED

These certifications underscore my expertise and commitment to continuous learning in technology and software development:

- Database Programmer ([BNSP](#))
- Node.js Development ([Progate](#))
- AI Mastery ([Orbit Future Academy](#))
- Architecting on AWS ([Dicoding](#))
- Applied Machine Learning Development ([Dicoding](#))
- TOEFL - ECT ([ITTP](#))
- NodeJS - The Complete Guide ([Udemy](#))

ACHIEVEMENT

Two scientific journal publications:

- Published “Classification Taxonomies Genus of 90 Animals Using Transfer Learning ResNet-152” (Corpus ID: 268996687 [Sinta 1](#)), achieving a highest accuracy of 92%.
- Published “Clickbait News Headline Classification Using RNN-LSTM” ([Sinta 3](#)), achieving an accuracy of up to 79%.