

BILLISANY AKHYAR

Bekasi, Jawa Barat, 17521 | 0877 3770 9359 | billisanyakhyar24@gmail.com | [linkedin](#) | [bilscode.com](#)

PROFESSIONAL SUMMARY

Results-driven Engineering Lead and System Architect with 6+ years of backend engineering experience, including 2+ years leading engineering teams. Proven background in designing scalable, event-driven microservices and high-throughput backend architectures while bridging high-level technical strategy with hands-on execution. Dedicated to enforcing strict software design principles, mentoring engineers, and delivering resilient infrastructure aligned with strategic business goals.

EXPERTISE

- **Architecture & System Design:** Event-Driven Microservices, Change Data Capture (CDC), AI Integration & RAG Systems, CQRS, RESTful API Design, System Scalability & Optimization.
- **Programming Languages:** Rust, Python, TypeScript, JavaScript (Node.js), PHP, Laravel
- **Databases & Search:** PostgreSQL, PGVector, MySQL, NoSQL, Redis, ElasticSearch
- **Middleware & Infrastructure:** RabbitMQ, Docker, API Gateway
- **Leadership & Practices:** Technical Leadership, Code Review & Quality Assurance, SOLID Principles, TDD / Software Testing, Technical Documentation

PROFESSIONAL EXPERIENCE

Lead Developer | PT. Monex Investindo Futures | Jakarta | Jan 2024 – Present

- Lead and mentor a team of backend developers, conducting thorough code reviews and enforcing SOLID principles to maintain high software quality and maintainability.
- Spearheaded the end-to-end design and implementation of an event-driven Change Data Capture (CDC) system using Rust and RabbitMQ for real-time, low-latency data synchronization across distributed databases.
- Architected and deployed an intelligent Retrieval-Augmented Generation (RAG) system using Python and vector search pipelines to enhance internal context-aware data extraction.
- Collaborated with cross-functional stakeholders to define technical specifications, balancing strict software design principles with business timelines and requirements.
- Optimized application performance and system reliability by developing monitoring algorithms and refining technical configurations.
- Authored and maintained technical documentation while continuously introducing modern technologies and tools to boost overall team productivity.

Backend Developer | PT. Monex Investindo Futures | Jakarta | May 2022 – Jan 2024

- Configured API Gateway, Elasticsearch, Redis, and Docker to support system infrastructure, enhancing overall platform security, searchability, and performance.
- Engineered modular, flexible, and reusable code bases while authoring comprehensive unit tests to achieve 95% code coverage.
- Implemented event-driven microservice architecture utilizing RabbitMQ and CQRS patterns to ensure seamless, real-time data synchronization across databases.
- Integrated MetaTrader platform with internal application systems and developed scalable web backends using Node.js and Laravel frameworks.
- Managed efficient SQL and NoSQL query optimizations and implemented WebSockets for real-time notifications.

- Actively contributed technical suggestions and architecture design enhancements during Agile meetings, while delivering transparent updates on deadlines and deliverables.

Web Developer | PT. Cazzh Teknologi Inovasi | Purwokerto | Mar 2020 – May 2022

- Designed, developed, and published 10+ web applications, including 3 multi-tenant architecture systems to support various client business models.
- Architected end-to-end client-side and server-side solutions, configuring Cloud & Virtual Private Servers (VPS) using Laravel Forge and CLI.
- Engineered RESTful APIs to enable seamless, real-time data communication across backend systems, web applications, and mobile applications.
- Integrated third-party APIs and improved internal engineering procedures for system testing, maintenance, and process automation.
- Actively participated in technical discussions to propose design enhancements and ensure timely delivery of project milestones.

Freelance Full Stack Developer | PT. Astra Otoparts | North Jakarta | June 2021 – Jan 2023

- Designed and developed 2 custom web applications to streamline enterprise operational processes and system workflows.
- Modernized legacy web functionality by refactoring codebases, updating dependencies, and integrating custom plugins/extensions.
- Implemented functional testing and system validation procedures to ensure high availability and application stability.

Freelance Full Stack Developer | PT. Putra Putri Harapan Bangsa | Purwokerto | Mar 2022 – Sept 2022

- Engineered 2 full-stack web applications tailored to organizational administrative and client management requirements.
- Enhanced user interface and system performance through database query optimization and core component updates.
- Collaborated directly with client stakeholders to gather technical requirements and deliver scheduled feature enhancements.

EDUCATION

Bachelor of Computer Science | Informatics | 2018 - 2022

Institute Technology Telkom – Purwokerto

GPA : 3.73/4.00