Nguyễn Minh Sang

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Passionate technology enthusiast with a focus on GoLang, aiming to transition to a Senior Back-End Developer role within 1-3 years. With 5 years of experience in technology companies, I am committed to continuous skill development and contributing to company growth.

WORK EXPERIENCE

Back End Developer EVIDA CO., LTD

Aug 2024 - Present Ho Chi Minh City, Vietnam

- Implemented OCPP standards in the company's charging system using Go.
- Designed, developed, tested, and maintained high-quality software components with Go.
- Created and managed APIs to enable communication among different elements in the charging infrastructure, adhering closely to OCPP specifications.
- · Conducted thorough testing of software components to ensure reliability, scalability, and security.
- Collaborated closely with business teams and hardware partners to facilitate smooth communication across various components of the EV charging system.
- **Developed comprehensive test cases** for various OCPP message flows and scenarios to validate the system's compliance with OCPP standards, ensuring accurate transaction handling, effective error management, and robust security measures
- Kept up-to-date on the latest industry trends, technologies, and advancements related to EV charging systems and OCPP standards.
- Designed and implemented a CMS partner portal to enable partners to log in, view meter value data, export reports in PDF format, and receive automated monthly, quarterly, and yearly meter value reports via email.
- Developed backend services to automatically collect meter value data from EV charging boxes on a monthly basis and store it for reporting and auditing purposes.
- Integrated email notification system to send periodic reports to partners, improving transparency and operational efficiency.
- Worked with technologies such as Golang, Gin, GORM, JWT, Redis, Docker, MySQL, Swagger, MQTT, GCP.

Software Engineer Huu Hong Machinery Join Stock Company

Oct 2020 - Mar 2024 Ho Chi Minh City, Vietnam

• Designed and built high-performance APIs with Golang, integrating with energy management and billing systems.

- Led API architecture and development, collaborating with stakeholders to translate business needs into scalable solutions.
- Improved system efficiency by 40% using Golang's concurrency model and optimized database queries with GORM.
- Reduced API response times by 50% by implementing caching mechanisms with Redis and optimizing database indexes.
- Enhanced security compliance, implementing JWT authentication and role-based access control, reducing unauthorized access incidents by 90%.
- Increased development speed by 30% by introducing CI/CD pipelines for automated testing and deployment.
- · Reduced server costs by 25% by optimizing backend services and implementing resource-efficient Golang solutions.
- · Worked with technologies such as Golang, Gin, GORM, JWT, Redis, Docker, Oracle Database, Swagger.

Software Engineer (Golang & System Development)

Sep 2019 - Jun 2020

SÔNG LA TECHNICAL EQUIPMENT CO., LTD

Ho Chi Minh City, Vietnam

- Developed internal web applications using Golang to optimize inventory and contract management.
- Automated data processing workflows, reducing manual workload by 60%.
- Led system migration from legacy software to a modern Golang-based backend, improving scalability.
- Provided technical support and analytics for sales and customer service teams.
- · Enhanced system reliability through error handling and logging mechanisms.
- · Worked with technologies such as Golang, Gin, GORM, JWT, Redis, MySQL, Swagger, AWS.

EDUCATION

Engineer's degree Electrical Engineering Technologies

Sep 2015 - Jun 2019

Industrial University of Ho Chi Minh City

GPA: Good

- Academic Achievements:
 - Merit Scholar: Awarded a 50% tuition scholarship for the first semester of the fourth academic year (2018-2019), recognizing
 academic excellence and dedication to studies.

Key Skills Gained:

- · Project management and teamwork skills
- Communication and presentation skills

SKILLS

Optimization Techniques: Performance optimization, Memory Optimization, Database Optimization, Code Optimization

Soft Skills: Leadership Skills, Communication Skills, Problem-Solving Skills, Teamwork and Collaboration, Adaptability and Learning Agility, Attention to Detail and Quality Assurance

Tech Stacks: GoLang, Gorm, Gin, Echo, Redis, MySQL, Postgres, JWT, Swagger, SQL-Migrate, Restful API, Clean Architecture, Optimization Techniques, OCPP, AWS, GCP

Software Development Skills: API development, Database Design, System Design, Performance Optimization, Clean Architecture, Design

PROJECTS

OCPP Server - EV Charging

Aug 2024 - Present

Development of a robust OCPP (Open Charge Point Protocol) car server for EBOOST, aimed at managing and monitoring electric vehicle charging stations. The server integrates with MQTT for real-time communication and supports various functionalities such as remote start/stop transactions, diagnostics, firmware updates, and configuration management. In addition to this, a dedicated API was developed for mobile applications to facilitate seamless interaction with the OCPP server. This API provides endpoints for user authentication, charge station management, and transaction monitoring, enabling mobile users to access real-time data and control charging processes directly from their devices.

Technologies Used:

- Programming Language: Go
- Frameworks/Libraries: Eclipse Paho MQTT, urfave/cli, Gin, GORM, Redis
- Architecture: Microservices

Key Responsibilities:

- Implemented MQTT client and server functionalities for real-time communication with charging stations.
- Developed a comprehensive RESTful API for mobile applications to communicate with the OCPP server.
- Handled user authentication and authorization using JWT to ensure secure access to the API.
- Integrated WebSocket for real-time notifications and updates on charging status and transactions.
- Ensured secure and efficient data transfer using JSON for payload serialization.
- Configured and managed server settings, including TLS for secure communication.
- Handled signal interruptions and ensured graceful shutdown of the server.
- · Comprehensive API documentation using Swagger

Achievements:

- Successfully integrated multiple OCPP operations with MQTT, enhancing the real-time capabilities of the server.
- Launched the mobile API, enabling users to start/stop transactions and receive updates on charging station status directly from their devices.
- Improved the reliability and scalability of the server by implementing robust error handling and logging mechanisms.
- Enhanced user experience by reducing latency and providing a smooth interface for mobile app users to manage charging processes.

ORDER APP (INDIVIDUAL PROJECT) [2]

May 2024 - Jun 2024

Position: Backend Developer | Team size: 1

Description:

- This mobile application empowers users to conveniently order and purchase fast food. The intuitive interface allows users to browse
 menus, select items, and place orders with ease.
- Reduced API response times by 20% by refactoring code, optimizing database queries, and implementing load balancing techniques.
- Improved application performance by 15% by employing memory optimization techniques and minimizing resource-intensive operations.

Key functionalities developed:

- User registration, login, and account management (including password recovery).
- User profile management for updating and deleting personal information.
- Menu management system for viewing, adding, editing, and deleting menu items.
- Order management system with features for adding items to cart, modifying orders, and completing purchases.
- Promotion and discount code functionality (creation and application of offers).
- Admin panel for managing users, menu items, promotions, and viewing feedback.
- Payment gateway integration for secure transaction processing.
- Order history and saved addresses features for user convenience.
- Feedback system for user reviews and experience ratings.
- Middleware implementation for enhanced security and performance.
- JWT authentication for secure user access.
- Database migrations and data persistence management.
- Comprehensive API documentation using Swagger.

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- Thorough testing and quality assurance procedures.
- Ongoing maintenance and support for the application.

Technologies: Golang, Gin, Gorm, JWT, SQL-Migrate, RESTful API, PostgreSQL

API FOR WEB HHM PLC (COMPANY PROJECTS)

Jan 2023 - Dec 2023

Position: Backend Developer | Team size: 2

- Developed robust and maintainable API using clean architecture principles, ensuring clear separation of concerns, high testability, and scalability using GIN, GORM, REST API, and JWT for seamless integration with other software systems (Mobile App, Web App for Customer).
- **Optimized** data retrieval for high-volume processing (over 100k orders/day) by implementing efficient caching strategies and database indexing techniques.
- Implemented JWT for secure user authentication within the API.
- · Automated invoice issuance by integrating with electronic invoice software, delivering invoices directly to customer emails upon

successful payment.

- Troubleshooted and resolved critical system bugs within a tight 2-week timeframe, significantly improving overall performance.
- Conducted thorough quality checks to ensure code integrity and functionality.
- Provided ongoing maintenance and support after successful software deployment.

Technology Stack: Golang, Gin, GORM, JWT, Redis, Swagger, Oracle Database

API FOR WEB HHM RF AND 3G (COMPANY PROJECTS)

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Position: Backend Developer | Team size: 5

 Building a robust RESTful API using Golang (Gin framework) for seamless integration with customer-facing applications. (REST API, Golang, Gin)

Apr 2021 - Dec 2022

- Implementing a server-side component to receive and process high-volume frame data (over 1 million orders/day) from remote
 metering devices RF and 3G. (Scalability, Message Queues (RabbitMQ/Kafka))
- Designing algorithms for power calculation based on the extracted data from the frame stream. (Electrical Engineering Knowledge Potential Collaboration)
- **Developing a user management system** with role-based access control (Level 1-4) adhering to EVN regulations for secure user authentication and authorization. (**User Management, JWT, EVN Compliance**)
- Utilizing GORM for potential database storage of parsed data for further analysis. (Database, GORM)
- · Providing API documentation (Swagger) for smooth integration with the frontend team. (API Support, Swagger)
- Implementing efficient caching strategies and database indexing for optimized data retrieval. (Scalability, Caching, Database Indexing)
- Troubleshoot and resolve critical system bugs to ensure optimal performance. (Problem-Solving)
- Conducting thorough quality checks to maintain code integrity and functionality. (Quality Assurance)
- · Providing ongoing maintenance and support after deployment. (Maintenance & Support)

Technology Stack: Golang, Gin, GORM, JWT, Redis, Swagger, MSSQL Database