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About Me

A seasoned software engineer specializing in enterprise-level systems and performance optimization, with **3 years of hands-on** experience. Focused on building systems and automating deployments in **high-concurrency environments**, I have spearheaded complete architecture implementations from the ground up —leveraging data-driven problem-solving to consistently enhance system stability and efficiency

Technical Skills

Cloud Services

- **AWS**: S3, RDS, EC2
- **GCP**: Cloud Storage, Cloud SQL, Compute Engine
  Experience includes file storage, database deployment, environment setup, and auto-scaling configurations.

Backend Development

- **Languages**: Java (primary), Node.js, Python (basic)
- Proficient in **RESTful API design**, **modular architecture**, and **system design planning**.

Frontend Development

- **Frameworks**: Vue.js (2 / 3), React
- Familiar with **responsive web design (RWD)** and frontend layout techniques, with full-stack integration experience.

DevOps & Deployment Automation

- **Containerization**: Docker, Docker Compose, Docker Swarm
- **CI/CD**: Jenkins, GitLab CI
- Experienced in writing **Shell / Batch scripts** for automated deployments and maintaining end-to-end CI/CD pipelines.

System Monitoring & Log Analysis

- **Elastic Stack**: Elasticsearch, Logstash, Kibana
- **Prometheus**: Service and system metric monitoring
- **JConsole**: JVM performance and resource tracking
  Skilled in **monitoring system integration and diagnostics**, effectively supporting system stability and issue tracking.

Work Experience

Software Engineer

Onework Co., Ltd. • *Aug 2024 – Apr 2025*

Project-Based System Development

PDS-Connected IoT Platform (End-to-End Independent Development)

- Designed backend architecture and implemented features including API development, performance testing (JMeter, Postman), Dockerized deployment, and Jenkins-based CI/CD pipeline.
- Managed over **30 proxy units**, each handling **10,0000+ sensors**, **1,0000+ devices**, and **500+ equipment**, ensuring real-time data processing and frontend visualization.
- Optimized **JVM performance** and WebSocket handling to process high-frequency payloads (optical image streaming every 500ms, multi-proxy sensor updates within 1s).
- Reduced equipment query latency from **64 seconds to under 95 milliseconds**.
- Addressed mobile server data synchronization challenges under **low bandwidth (54 Kbps)** environments.
- Applied **Observer** and **Singleton patterns** to decouple modules and implement real-time state propagation.

Cathay FM-Server Refactoring Project (Architecture & API Design)

- Led the transition from a monolithic architecture to a **modular, distributed system** (Portal Server + multiple FM services).
- Collaborated with PMs to design system architecture diagrams and refactor legacy functionality for improved scalability and maintainability.
- Handled **80M+ annual IoT records**, integrating **Kafka** and **local message tables** for reliable synchronization and compensation in high-load scenarios.
- Resolved real-time synchronization and broadcast performance across multi-building environments using WebSocket.

FarEasTone HEMS-Server (Independent Development)

- Developed a residential energy management system with **scheduled data processing** and **Redis-based multi-level caching** (by year, month, week, day).
- Designed complete API layers and integrated **crontab scheduling** to handle time-series IoT data aggregation and statistics.

Product-Oriented Platform Development

IoT-Service: Centralized IoT Module Framework

- Consolidated common logic and schema across internal IoT projects into a unified service platform.
- Implemented configurable alert workflows using **Strategy**, **Chain of Responsibility**, and **Template Method** patterns.
- Built reusable **CRUD components** (Controller / Service / DAO) and packaged them as a **Spring Boot Starter** for cross-project adoption.
- Deployed artifacts to an internal **Nexus repository** to support modular reuse and version control.

Line-Service: Internal Notification Module

- Developed a reusable wrapper for the **LINE Messaging API** to replace the deprecated LINE Notify service.
- Enabled simple configuration (Channel Token + Group ID) to quickly integrate real-time group notifications via API.

Core Technologies & Tools

Spring Boot, PostgreSQL, Redis (Pub/Sub), InfluxDB, Kafka, RabbitMQ, WebSocket, MongoDB, Elasticsearch, MinIO, Jenkins, Docker, JMeter, Postman, Node.js, Shell / BAT scripting, JConsole

Software Engineer

ESound Technology Co., Ltd. — *Taipei, Taiwan*
Sep 2023 – Feb 2024

- **Full-Stack Development & Maintenance**
  Independently led full-stack development and ongoing maintenance for the *Child Placement and Tracking System*, including feature enhancements, bug fixes, performance tuning, and system deployment. Covered end-to-end development from backend logic to frontend UI.
- **Technology Stack & Integration**
  Backend built with **Spring MVC**, database systems included **Oracle** and **MySQL**. Frontend technologies used: **jQuery**, **Thymeleaf**, **Bootstrap**, and **CSS**.
  Designed and optimized **Oracle Procedures**, **Functions**, **Schemas**, **Tables**, and **Indexes** to significantly improve query performance.
- **System Performance & Security Enhancements**
  Integrated **SonarQube** for static code analysis, enhancing code maintainability and system security.
  Developed **Shell and Python automation scripts** to streamline deployment and testing processes, increasing development efficiency.
- **Cross-Department Collaboration & User Support**
  Worked directly with social service personnel from various municipalities to understand real-world usage challenges and provide prompt solutions including bug resolutions, UI refinements, and user experience improvements.
- **Support for Additional Systems**
  Assisted in maintaining other related systems, such as the *Adoption Management System*, contributing to development, integration, and system testing to enhance overall system reliability and maintainability.

Software Engineer

Hitrust Technology Co., Ltd. — *Taipei, Taiwan*
Aug 2022 – Sep 2023

Project Highlights

- **Veri-id System Refactoring & Feature Expansion**
  Led module refactoring and integration, including **SSO-based permission design**, **approval mechanisms**, **custom report exports (Excel/PDF)**, and **third-party API integration**.
  Resolved integration bottlenecks and enhanced overall system modularity and maintainability.
- **ACS / 3DS System Optimization & Asynchronous Architecture**
  Refactored the transaction query module by applying **indexing and table partitioning**, reducing query time from 30 seconds to under 3 seconds.
  Integrated **RocketMQ** to handle asynchronous transaction writeback, significantly improving system stability and scalability.
  Developed and executed **data migration scripts** to transition from **Oracle to MySQL**.
- **Test Automation & Efficiency Improvement**
  Created automated test modules using **Selenium**, replacing manual testing and reducing testing time by over **50%**.
- **Bank of Communications / SeaMoney Testing Support**
  Refactored legacy code from **JPA to MyBatis**, ensuring better testability through comprehensive unit tests.
  Collaborated with the Shanghai team to define **test workflows and documentation**, ensuring consistency and test quality.

Technology Implementation & DevOps

- **Infrastructure & DevOps Automation**
  Built and maintained development and deployment infrastructure using **Dockerfile**, **Docker Compose**,

Portainer, **Docker Swarm**, **ELK Stack**, and **SonarQube**.
Integrated and optimized **GitLab CI/CD pipelines**, enabling automated and streamlined deployments.

- **Monitoring & Observability**
  Implemented real-time system and service monitoring dashboards using **Prometheus** and **Grafana**.
- **Security & Code Quality Assurance**
  Used **SonarQube** for static code analysis to enforce code quality and consistency.
  Conducted regular **vulnerability scanning and dependency upgrades** to enhance system security.

Cross-Team Collaboration & Technical Support

- Worked closely with **PMs, AI engineers, technical leads, clients, and offshore teams** (Shanghai, Beijing) to ensure project alignment and delivery.
- Temporarily dispatched to **Beijing** for on-site technical support, demonstrating strong **adaptability** and **cross-functional communication skills**.

MIS Specialist

EverBiz Industrial Co., Ltd. — *Taipei, Taiwan*
Apr 2016 – Dec 2016

- **Automated Reporting & Workflow Optimization**
  Developed **Excel VBA scripts** to automate the generation of departmental reports and analytical charts, significantly reducing manual effort and improving data processing efficiency.
- **Internal Account and Access Management**
  Supported the IT team in managing employee accounts, system access, and device configurations, ensuring data security and proper access control across the organization.
- **VBA Tools & Automation Script Development**
  Created multiple **custom VBA tools** for data cleansing, report generation, automatic data comparison, and routine task automation, streamlining daily operational workflows.
- **Internal Monitoring & Attendance Automation**
  Contributed to the development of **internal surveillance software** and an **automated employee check-in system**, improving administrative efficiency and attendance tracking.

Education

Tamkang University of Science and Technology

B.B.A. in Information Management

2016 – 2021

Actively pursued IT skills during university, earning certifications including CCNA, MTA, and TQC Java. Developed a strong interest in Java, leading to in-depth study of language design and practical application. Successfully transitioned into the industry as a Java software engineer, applying academic knowledge to real-world development.

Technical Skills

Backend Development

- **Languages / Frameworks**: Spring Boot Framework, Java, Python, Node.js
- **Data Access**: JPA, MyBatis
- **Design Patterns**: Observer Pattern, Strategy Pattern, Chain of Responsibility, Template Method, Singleton

Frontend Development

- **Markup & Styling**: HTML / CSS, Bootstrap

- **Languages / Libraries**: JavaScript, jQuery, Vue.js, React.js
- **Real-time Communication**: WebSocket, LINE Messaging API

Databases & Storage

- **Relational Databases**: PostgreSQL, MySQL, Oracle
- **NoSQL / Time-Series Databases**: Redis, InfluxDB, MongoDB, Elasticsearch
- **Object Storage**: MinIO

Cloud & Deployment

- **Cloud Platforms**: AWS, GCP
- **Containerization**: Docker, Docker Swarm
- **Deployment / Automation Tools**: Jenkins, Shell Script, BAT Script

Monitoring & Analysis

- **Monitoring Tools**: Grafana, Prometheus, Kibana, JConsole
- **Logging & Alerting**: ELK Stack (Elasticsearch, Logstash, Kibana)

Middleware & Real-Time Processing

- **Message Queues / Messaging Platforms**: Kafka, RabbitMQ, Redis Pub/Sub

Version Control & Collaboration

- Git, SVN, Nexus Repository

Languages

- **Chinese** — Native / Bilingual Proficiency
- **English** — Advanced Proficiency