IKUMA NAGAHARA

Japanese Software Engineer

PROFESSIONAL EMPLOYMENT EXPERIENCE

Pixel Software - Japan, Ehime

2021.04 - 2023.06

Software Engineer

Product Solutions Division 1

- 1. Industrial and Public Plant Monitoring System Development
 - Developed a new system using Golang and Python to replace the existing VB and C gateway systems, improving maintainability and scalability.
 - Optimized Golang's concurrency features to handle thousands of sensor tags, increasing data throughput by over 40%, enhancing data stability, and reducing processing time.
 - Developed a TCP/IP-based socket gateway to manage real-time data flow in industrial environments.
 - Programmed control software in C# for data operation in Windows environments.
- 2. Backend Development with REST API
 - Designed and maintained internal management systems using Python (Django) to support employee information management and project tracking.
- 3. Collaborative Development and Quality Assurance
 - Collaborated within a 7-member team to plan, design, and deliver software functional specifications.
 - Developed and executed test plans to ensure functionality, performance, and security.
- 4. Documentation and Reporting
 - o Created detailed technical documentation, including system architecture and API specifications.
 - Prepared reports and presentations to communicate project progress and solutions to stakeholders.

Education Background

Shanghai International Studies University - Bachelor of Arts; GPA 3.4 / 4.0

2019.9 - 2021.6

East China Normal University - Master of Software Engineering; GPA 3.1 / 4.0

2023.9 - 2026.6

Master Degree Research Project: Machine Learning

Building a Flight Ticket Sales Forecasting Model Using Machine Learning

- Analyze the factors influencing prices based on historical airline ticket price data, and examine which factors affect airline ticket prices
- Compare the predictive accuracy of multiple machine learning algorithms (e.g., LightGBM, GBDT, SARIMA) to identify the optimal method
- Researching a unique machine learning algorithm aimed at predicting the optimal airline ticket prices

LANGUAGES AND TECHNOLOGIES

- Programming Languages: Golang; Python; C#; javaScript; SQL
- Frameworks: Gin; Django; .NET
- Tools: Git; GitHub; Docker
- Operating Systems: Windows; Linux
- Other Technologies: TCP / IP (Network Programming, Socket Programming); Machine Learning

Languages

Japanese (Native); English (Professional working proficiency); Chinese (Fluent)