# IKUMA NAGAHARA

#### PROFESSIONAL EMPLOYMENT EXPERIENCE

Pixel Software Corporation - 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
  - 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

#### **TECHNICAL EXPERIENCE**

GoDrone https://github.com/namashin/GoDrone

Go Gin GoBot ffmpeg OpenCV

- Control the dji Tello drone remotely through a web browser.
- Stream live video from the drone's camera.

#### 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)

### Languages

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