IKUMA NAGAHARA

PROFESSIONAL EMPLOYMENT EXPERIENCE

Pixel Software Corporation

2021.04 - 2023.06

Software Engineer

Product Solutions Division 1

- Developed and improved the previous VB and C factory gateway system into a new Go and Python gateway system, providing various deliverables including functional and technical designs, models, code, and unit tests.
- Programmed a TCP / IP-based socket gateway system to save real-time data from factory sensors into a database and pass the data to a web frontend.
- Debugging and Trouble shooting applications during support and maintenance work (Python; Go; SQL)
- Utilized Golang's concurrency features (goroutines and channels) to handle thousands of data sensor tags simultaneously, increasing data throughput by over 40% without incurring additional hardware costs (as per benchmark results).
- Created comprehensive software documentation for customers to understand the system.

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]

2023.9 - 2026.6

TECHNICAL EXPERIENCE

Projects

PyCat https://github.com/namashin/PyCat GoCat https://github.com/namashin/GoCat

Python Go Windows Mac

- Displays a system tray icon that changes based on CPU usage.
- Allows switching between different animal-themed icons (cats; horses; parrots) from the system tray menu.
- Supports launching applications (WeChat; QQ; Chrome) directly from the system tray menu.

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; C#; SQL
- Frameworks: Gin; Django; Flask; .NET
- Tools: Git; GitHub; ffmpeg; OpenCV; Docker
- Operating Systems: Windows; Linux
- Other Technologies: TCP / IP (Network Programming, Socket Programming)

Languages

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