

Yu, Zhen-Yi



kevinyo0709@gmail.com |



0935-090-828 |



github.com/short435 |



www.linkedin.com/in/zhenyiyu

Education

National Cheng Kung University

M.S in Aeronautics & Astronautics of Engineering

Tainan, Taiwan

Sep. 2017 - Jul. 2019

- Related Course: Numerical Analysis, Computer Vision, Object Oriented Programming

National Cheng Kung University

B.S in Aeronautics & Astronautics of Engineering

Tainan, Taiwan

Sep. 2012 - Jul. 2017

- Related Course: Advanced Engineering Mathematic, Genetic Algorithms, Linear Algebra

Work Experience

Aemass Inc.

Software Engineer

Taipei, Taiwan

Dec. 2020 - Present

- Designed, developed, tested and released for the software product.
- Developed cloud based service which related to customer's requirement.
- Problem solving for cross-team issues and communicating with the client side.
- Mentored the internship engineer for computer vision research and cloud service maintenance.
- Researched and developed for the computer vision and 3d algorithm on both CPU and GPU.

Micron Technology

Equipment engineer Intern

Taoyuan, Taiwan

Sep. 2012 - Jul. 2017

- Basic troubleshooting and daily maintenance for the CMP module machine.
- Fetched the real time data from the web and estimated the lifetime of the component for the CMP machine. In order to schedule the down time for every machine, reaching the target effectiveness.

Syntec Technology

Software engineer Intern

Hsinchu, Taiwan

Sep. 2012 - Jul. 2017

- Integrated Robotic arm control with the detecting object by computer vision algorithm.
- 2017 Industrial Automation Exhibition.

Project Experience

3D Data Management System. | Python | JavaScript | AWS | SQL | Redis | HTML |

Aemass Inc.

- Constructed scalable web service with FullStack designed, pipeline, database, cache, RestFulAPI, CICD and Cloud infrastructure.
- Developed Slack/Email notification, Auto task distributing system, and task tracking dashboard.
- Decreased 80% of data pre-processing time and improved the efficiency. Accomplished project goals while ensuring customer satisfaction.

PhyScan | C# | .Net | Windows Form | AWS |

Aemass Inc.

- Mid size commercial product which had 1000+ users.
- Real Time streaming rgb-d scene from K4A and record it as mkv files.
- Log tracking system and alerting system by AWS CloudWatch.
- Multithreading for streaming, uploading scan, UI controlling.

Odin | C++ | Linux |

Aemass Inc.

- Built the proto type product for projecting a panoramic view in order to create a virtual environment.
- Demonstrated and tech supported with the client.
- Researched for the multiple camera and projector calibration by structured light algorithm.

AemassCaptureSDK | C++ | CMake | CTest | Shell |

Aemass Inc.

- Refactored and modularized the 3d algorithm and sensor streaming and data collection features.
- Defined the format for the data collection making the data easier to calculate from different sensors.
- Aligned the time from multiple sensor recordings at the same time.

BodyFusion | C++ | CMake | CUDA |

Aemass Inc.

- Engine of non-rigid object reconstruction algorithm.
- Implemented the algorithm and modulated by GPU compiling based on Cuda. (3D Kdtree, 3D Knn search)

Skills & Interests

Programming Language: C++, Python, C#, Cuda, Swift, JavaScript, Html, Css, bash

Libraries and Tools: OpenCV, CMake, QT, WinsForm, Flask, Git, Docker, CICD, SQL, Redis, AWS, TCP/IP, WebSocket

Interests: Traveling.(Solo traveling in the world from Oct 2023 - Feb 2024)