

# WONG KEH FEI

(黃恪非)



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📍 Kanagawa, Japan

🌐 <https://github.com/Reim6118>

## SKILLS

- Main programming language: C#, Python, C++
- Unreal, Unity, OpenCV, YOLO
- Arduino, Linux, ROS

## EXTRACURRICULAR

### INTERNSHIP IN SONY

08/2023 - 09/2023

During the one month internship, I worked in Sony TIS, Computer System Development Dept, researching and realizing a novel cloud native gaming system based on Unreal Engine

## EDUCATION

### GRADUATE SCHOOL OF MEDIA DESIGN

Keio University (Japan)

2021 - 2023

### BACHELOR OF SCIENCE - COMMUNICATION ENGINEERING

National Central University (Taiwan)

2017 - 2021

## PROFILE

I graduated from Embodied Media lab, Keio Media Design.

My past research includes AI generated haptic, drones, VR and AGV on ROS. I have been interested in learning diverse technologies and integrating them together to innovate novel experiences.

## RECENT PROJECTS

### AI SUPPORTED HAPTIC DESIGN PROCESS (MASTER THESIS)

06/2022 - 07/2023

- Multi-model deep learning framework that automatically generate haptic audio tracks to simplify the haptic design process in specific scenarios
- The automatically generated haptic tracks achieve over 70% accuracy and can be easily edited manually for further improvement.
- [https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara\\_id=KO40001001-00002023-1014](https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=KO40001001-00002023-1014)

### AERONETTE: WEARABLE DRONE SYSTEM FOR REMOTE MULTI-DIRECTIONAL TELEOPERATION

02/2022 - 12/2022

- Work published at ICAT-EGVE 2022 as Co-first author
- Proof-of-concept that utilizes an open-source hexacopter drone to provide 6 directional cues and 2 rotational cues to the avatar user.
- <https://doi.org/10.2312/egve.20221296>

### VROD: A VR FRAMEWORK COMBINING THERMAL CAMERA FOR OBJECT DETECTION ON ROS DISTRIBUTION (BACHELOR THESIS)

2019-2020

- An AGV with intuitive VR control, human detection through thermal camera to suite various tasks in dark environment
- Realtime video streaming from Realsense camera on the AGV into VR
- Generate Lidar map of the current surroundings showing in VR
- Object detection based on modified Yolov3 framework

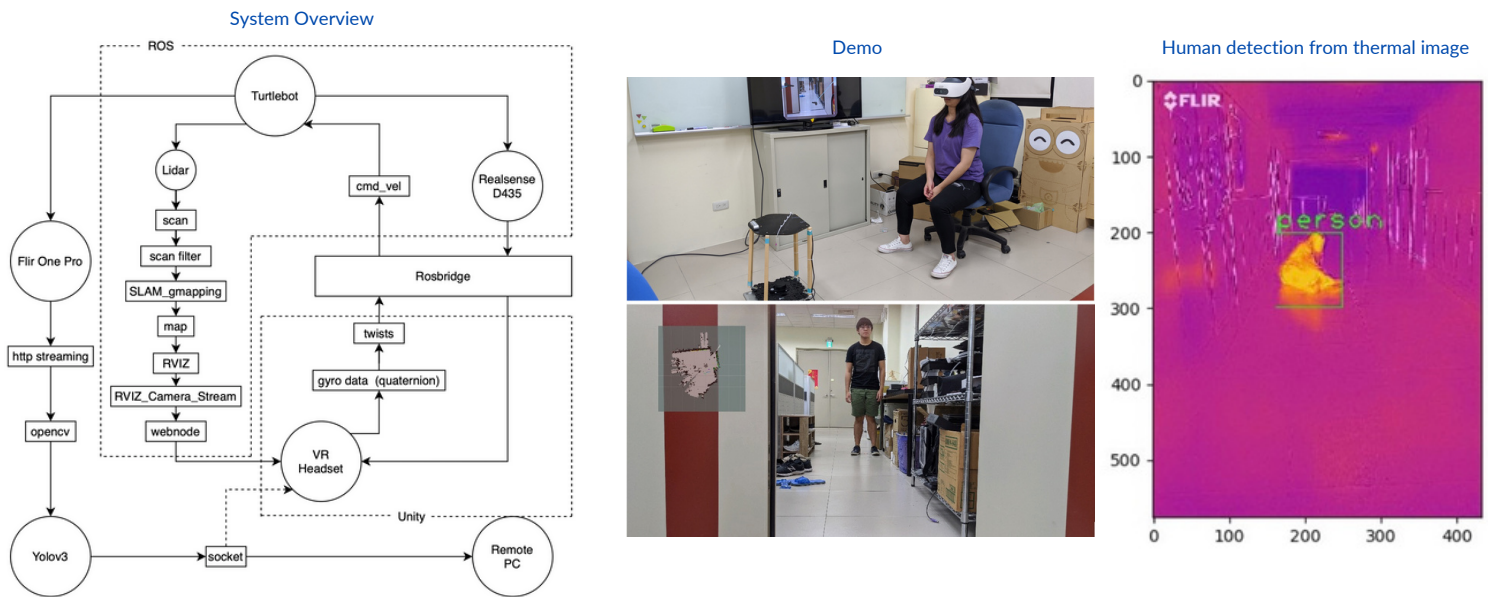
### CONGDHT: A PYTHON CRAWLER

2019

- A DHT python crawler for research purpose
- Collect seeds of current popular things on the P2P network
- Record the quantity of repeated seeds; Provide a ranking for each week

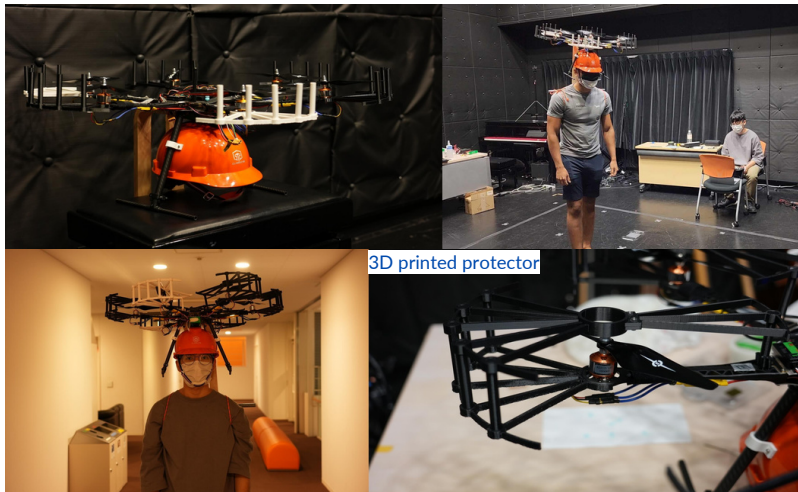
# PROJECTS

## VROD: A VR FRAMEWORK COMBINING THERMAL CAMERA FOR OBJECT DETECTION ON ROS DISTRIBUTION



## AERONETTE:WEARABLE DRONE SYSTEM FOR REMOTE MULTI-DIRECTIONAL TELEOPERATION

Experiment : Navigating participants with the drone



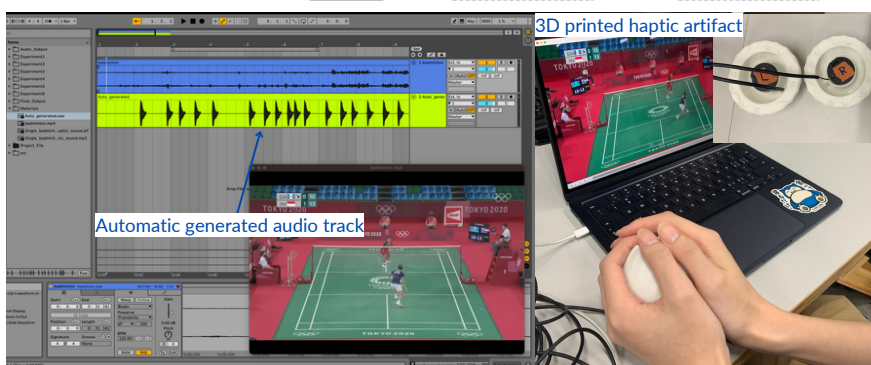
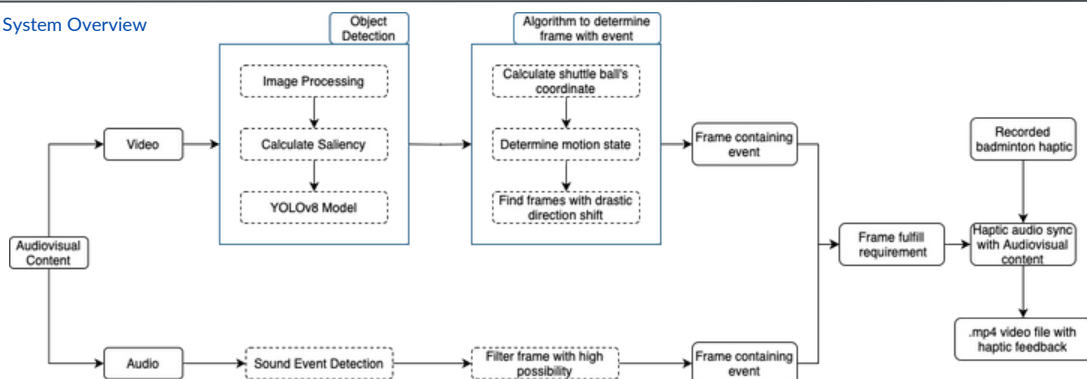
Accuracy for 8 Directional Forces

	Fw	Bw	L	TL	R	TR	Up	Down	Can't Tell
Fw	80%	20%							
Bw		100%							
L			0%	40%		20%			40%
TL			40%	60%					
R					100%				
TR					20%	80%			
Up							80%		20%
Down				20%			60%	20%	
↓									

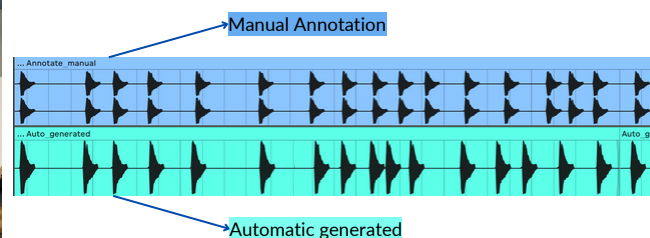
Ground Truth

## AI SUPPORTED HAPTIC DESIGN PROCESS

System Overview

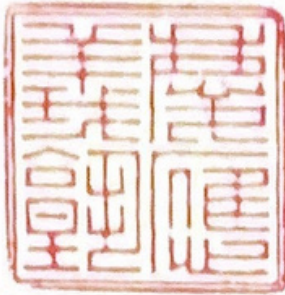


Comparison between manual annotation and auto generated haptic audio





第1014号



# 学位記

黄 恪非

本大学大学院メディアデザイン研究科メディア  
デザイン専攻の修士課程所定の単位を修得し学位  
論文の審査ならびに最終試験に合格したことを  
証し修士(メディアデザイン学)の学位を授与する

2023年9月5日

慶應義塾大学長 伊藤公平 

The President of Keio University

in recognition of the successful completion of the course requirements,  
thesis, and final examination  
in our Graduate School of Media Design confers upon

WONG, KEH FEI

the Degree of  
Master of Media Design

Granted at Tokyo, Japan on September 5, 2023

ITOH Kohei  
President, Keio University

September 15, 2023

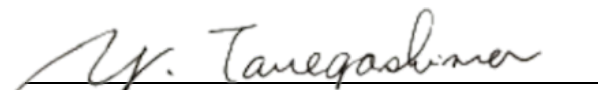
To Whom It May Concern:

Mr. Keh Fei Wong

This is to certify that Mr. Keh Fei Wong was an Internship Trainee of Sony Group Corporation. The details are as given below:

Full Name:	Mr. Keh Fei Wong
Date of Birth:	Keio University March 13, 1999
Period of Internship:	From: August 21, 2023 To: September 15, 2023
Division:	Technology Infrastructure Center System Platform Technology Div., Computing System Development Dept
Assignment:	Technology development and analysis toward cloud native gaming Evaluation and customization of Unreal game engines

Should you have any further questions, please contact Talent Acquisition Department of Sony People Solutions Inc. mail to: [hr-rec-global@jp.sony.com](mailto:hr-rec-global@jp.sony.com).

  
Yoshiko Tanegashima

General Manager  
Head of Talent Acquisition Department  
Electronics Human Resources Division  
Sony People Solutions Inc.