

# KWOK HUNG JOHN HO

+1(858)250-9116 ◇ johnho.khh@gmail.com

#6616 9175 Judicial Dr, San Diego, CA 92122

linkedin.com/in/johnkhho ◇ github.com/Johnkhk ◇ johnkhk.github.io/portfolio

## EDUCATION

---

### UC San Diego (BS/MS Program)

M.S Candidate in Intelligent Systems, Robotics & Controls

B.S in Electrical Engineering — Machine Learning & Controls

*Expected: Jun 2023 — La Jolla, CA*

*Graduated: Jun 2021 — La Jolla, CA*

## EXPERIENCE

---

### Application Technology Limited

Jun 2021 to Sep 2021

*AI Specialist Trainee*

- Quantized and converted Tensorflow models into TFlite models for deployment in edge TPU cameras. Implemented deep sort tracking and fall detection YOLO models into a NVIDIA Jetson Xavier. Used YOLOv5 to detect wild boars. Used transfer learning with PyTorch to train a face detection model and parallelized a mask classification model with multiprocessing. Created functionalities and built production ready web pages for displaying RTSP camera streams with React running on an edge TPU. Currently working on a carried object detection and multi-object tracking model.

### Risksis Technology Limited

Mar 2021 to Jun 2021

*AI and Web Engineer*

- Performed OCR and Evaluated the performance of NLP models such as BERT and XLM-RoBERTa on paragraphs within PDFs. Worked on a full stack web project using Vue.js and ASP.NET backend with MongoDB. Annotations for deep learning.

### ASTRI - Science Park, Hong Kong

Jun 2019 to Sept 2019

*Software Engineer Intern*

- Developed an augmented reality UWP application for the Microsoft HoloLens with Unity (C#) and ROS which allows the user to spawn objects via gestures at the location of AR tags. Utilized WebSocket protocol for communication between ROS and HoloLens.

## PROJECTS

---

### Cryptotrackerr.tk

Created and hosted a website that allows users to track cryptocurrencies. Used MERN stack and hosted the website on an AWS EC2 instance.

### Polar Coffee

Developed IoT features using a Raspberry Pi for a Smart Iced Coffee Machine. Created a website with Django that tracks user data and allows remote control of the machine through REST API and MQTT protocol.

### Folded Cascode OTA Amplifier Design

Completed a project of designing and biasing an amplifier to meet a range of specifications including gain, power dissipation, bandwidth and device sizing.

## SKILLS

---

### Programming:

### Modeling and Analysis:

### Web Development:

### Software & Tools:

### Microcontrollers:

Python, Java, C++, C#, LabVIEW

Autodesk EAGLE, LTspice, Cadence Virtuoso, Unity, SolidWorks

Javascript, React, Vue, Node, HTML, CSS, MongoDB, MySQL

Linux, Docker, ROS, L<sup>A</sup>T<sub>E</sub>X, Git, Docker, PyTorch, TensorFlow, OpenCV

Arduino, NVIDIA Jetson (Nano, TX2, Xavier), Raspberry Pi, BASYS Board