

Hi there 🙋

I received the M.Sc. degree in 2021 from Yonsei University, Seoul, Korea. Currently interested in designing MLOps architecture with IaC especially AWS CDK.

[My CV](#)

Aug : Location-based AR SNS

[#AWS](#) [#CDK](#) [#Serverless](#) [#Event-driven](#) [#IOS](#) [#AR](#)

- **Aug: Your next reality**
 - [App Store Link](#)
 - [Business logics with AWS serverless event-driven architecture.](#)
 - [Video streaming & image content distribution.](#)
 - AWS CDK(IaC) for deploying AWS resources.

MLOps

[#AWS](#) [#CDK](#) [#MLOps](#) [#AI](#) [#CCTV](#)

- **MLOps for AI CCTV**
 - [Architecture Diagram](#)
 - Dataset management with AWS Fathom(co-developing service with SKT)
 - Design & implement train, inference, conversion, deploy pipeline
 - Video streaming & image content delivery
 - Semantic image search
 - AWS CDK(IaC) for deploying AWS resources.
- **Radio tower anomaly detection with drone images**
 - Design serverless architecture for batch inference pipeline.
 - AWS CDK(IaC) for deploying AWS resources.

Libuv Game Server

[#linux](#) [#libuv](#) [#C++](#) [#C#](#) [#Unity](#)

- **LibuvGameServer**
 - On Ubuntu 18.04, using [libuv](#) for TCP connection.
 - Based on libuv's event loop, Network IO is single threaded.
 - **[Bug]** Segmentation Fault after continuous Disconnection and Connection.
- **LibuvGameServerClients**
 - Dummy Client is based on C# .NET framework
 - Client is based on Unity
 - Demo available [here](#)

Realtime Pose Estimation with Unity 3D Avatar

[#mediapipe](#) [#blazepose](#) [#Unity](#) [#3D](#) [#C#](#) [#Android](#)

- [BlazePoseWithUnity](#)

- Only has Demo and brief description of project due to confidential rights

Face Detection & Recognition

[#Face Recognition](#) [#Android](#) [#Firebase ML Kit](#) [#TensorFlow 2.0](#) [#TensorFlow Lite](#) [#Java](#) [#Python](#)

- [JHFace](#)

- Face recognition training & testing framework implemented with TensorFlow 2, Keras
- Supported backbones: **MobileNet**, **MobileNetV2**, **InceptionResNetV2**, **InceptionV3**, **ResNet50**, **ResNet50V2**, **ResNet101V2**, **MnasNetA1**, **MnasNetB1**, **MnaseNetSmall**, **NASNetLarge**, **NASNetMobile**, **Xception**, **MobileNetV3Large**, **MobileNetV3Small**, **EfficientNetLite0 ~ Lite6**, **EfficientNetB0 ~ B7**
- Supported losses: [ArcFace](#), [CosFace](#)

- [Android-FaceRecognition](#)

- Is runtime face identification on Android device. I used [IJB-C](#) dataset for testing labels.

- [FaceBird](#)

- Is game applicaiton which utilize ML Kit for controlling the bird with rotating Face

Gaze Tracking (Eye Tracking)

[#Gaze Tracking](#) [#Android](#) [#Firebase ML Kit](#) [#TensorFlow Lite](#) [#PerCom 2021](#) [#GAZEL](#) [#Java](#) [#Python](#)

- [GAZEL](#)

- Is a **Personalized Runtime Mobile Gaze Tracker**.
- This work is official implementation of GAZEL framework which is published in [PerCom 2021\(GAZEL: Runtime Gaze Tracking for Smartphones\)](#) .

- [GazeBird](#)

- Is game application which utilize GAZEL for controlling the bird.

- [MLKitGazeDataCollectingButton](#)

- Is gaze data collecting application for making gaze estimation model required for GAZEL.

TensorFlow Lite Python

[#TensorFlow Lite](#) [#Python](#) [#Interpreter](#)

- Works on TensorFlow Lite Python Interpreter.

Based on: <https://www.tensorflow.org/lite/examples>, converted Android Java(Kotlin) code to Python

- [TFLitePoseEstimation](#)
- [TFLiteDetection](#)

- [TFLiteClassification](#)
- [TFLiteSegmentation](#)

Power Management

[#Mobile](#) [#PM](#) [#flask](#) [#svm](#) [#dark mode](#)

- ▶ Works on optimizing Mobile device battery
- ▶ Works used to log iBeacons

Visualization on Web-browser

[#HighCharts.js](#) [#Go.js](#) [#flask](#) [#csv](#) [#Web browser](#)

- ▶ Visualizing Charts