

Yoon-Sung Kim

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EDUCATION

KAIST Daejeon, South Korea

M.S. in Computer Science [Feb. 2023], Advisor: Jongse Park

Sungkyunkwan University Suwon, South Korea

B.S. in Computer Science & Engineering [Feb. 2021]

- **Honors:** Scholarship for Academic Excellence (Spring 2015, Fall 2016, Fall 2017), College of Software Dean's List (Fall 2016, Fall 2017)

WORK EXPERIENCE

ONNX Runtime based Landmark Tracker Integration

Hyprsense, Burlingame, CA

Project in Hyprsense [Oct. 2019 ~ Feb. 2020]

- Integrated ONNX runtime based landmark tracker on facial motion capture SDK
- Implemented ONNX model converter guaranteeing stable performance on various GPUs

Facial Tracking Application for iOS

Hyprsense, Burlingame, CA

Project in Hyprsense [Mar. 2019 ~ Sep. 2019]

- iOS application for facial expression tracking rendered by SceneKit and MetalKit
- Exported character models with Blender and mapped its blendshapes to morphers of SCNNode

iPhoneXR 3D Data Capturing Application

Hyprsense, Burlingame, CA

Project in Hyprsense [Jan. 2019 ~ Jul. 2019]

- In-house iOS application capturing videos of RGB and depth data for training facial expression tracking
- Supported automatic data uploading to AWS cloud storage with compression for efficient data transmission

FPGA-based Acceleration

University of California, Irvine, CA

Research Project in I-SURF Program [Jun. 2018 ~ Dec. 2018]

- Using SDAccel, accelerated matrix computation on FPGA device
- Improved performance of computer vision algorithm using C++ and OpenCL

SKILLS, ACTIVITIES & INTERESTS

Programming: C++, CUDA, Python, Swift

Technologies / Environments: PyTorch, ONNX, Linux, Xcode, iOS

Interests: Hardware Acceleration, Computer Architecture, Quantization, Continuous Learning