# KUNHO KIM (김건호)

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## **EDUCATION**

KAIST (Korea Advanced Institute of Science and Technology)

Mar.2022 - Feb.2024 Daejeon, South Korea

M.S. in Computer Science

• Advisor: Minhyuk Sung

KAIST (Korea Advanced Institute of Science and Technology)

Mar. 2017 - Feb. 2022

B.S. in Electronical Engineering

Daejeon, South Korea

Double Major in Comuputer Science

#### **PUBLICATIONS**

[1] SyncDiffusion: Coherent Montage via Synchronized Joint Diffusions

Yuseung Lee,  $\mathbf{Kunho}\ \mathbf{Kim},$  Hyunjin Kim, Minhyuk Sung

NeurIPS 2023

[Project page] [Paper] [Code]

[2] OptCtrlPoints: Optimizing Control Points for Biharmonic 3D Shape Deformation

Kunho Kim\*, Mikaela Angelina Uy\*, Despoina Paschalidou, Alec Jacobson, Leonidas Guibas, Minhyuk Sung

Pacific Graphics 2023 (Full Paper)

[Project page] [Paper]

## RESEARCH EXPERIENCES

Geometric AI Lab, Undergraduate Research Intern

Dec.2021 - Feb.2022

• Advisor: Minhyuk Sung

Urban Robotics Lab, Undergraduate Research Intern

Dec.2020 - Jun.2021

- Advisor: Hyun Myung
- Study about last-mile system (PCL, LiDAR, Segmentation etc.)

DataStreams, Industry-Academia Research Intern

Sep.2020 - Feb.2021

- Advisor: Okjoo Choi
- Data to knowledge Text data visualization with entity linking

KI4AI, Undergraduate Research Intern

Sep.2020 - Dec.2020

• Preprocess voice data and study on the emotional TTS model using Tacotron

Robot Intelligence Technology Lab, Undergraduate Research Intern for COOP

Jul.2019 - Aug.2019

- Advisor: Jonghwan Kim
- Study about basic machine learning and data visualization

<sup>\*</sup> denotes equal contribution

DHive, CUOP Intern

Jun.2019 - Aug.2019

• Development of a modular AI prototype tool based on embedded OS using Docker – Object detection linked to Raspberry Pi3

# NMAIL, Undergraduate Research Intern

May.2019 - Aug.2019

- Advisor: Byunghyung Kim
- Face generation Create realistic face that look older with Deep Learning

#### TEACHING EXPERIENCES

Teaching Assistant (CS380) Introduction to Computer Graphics, KAIST	Mar. 2023 - Jun. 2023
(CS479) Machine Learning for 3D Data, KAIST	Sep.2023 - Dec.2023
Counseling Assistant KAIST Computer Science	Sen 2023 - Feb 2024

#### OTHER EXPERIENCES

Mathpang, ML Engineer

Aug.2021 - Jan.2022

• In charge of TIPS government support tasks, establishing ML pipeline Recommendation system & NLP

FLOATIC, Outsourcing

Aug.2021

• 3D modeling of robot logistics ware house map through Unity

## KAIST ICN Lab, Outsourcing

Feb.2021 - Mar.2021

• Development of interactive software app for evaluating children's cognitive abilities (Android App)

#### KAIST App Start-up Program

Dec.2020- Apr.2021

• Deploy the weight management iOS app "Minimum" (Design and Front-end development)

## Naver AI Burning Day, Advance to the Finals

Feb.2020

• Development of personalized AI English tutor "MAMAGO" Using Naver translated Papago API

#### **Prography**, IT union club 5th member

Sep.2019 - Feb.2020

• Deploy weather based AI Style Recommendation iOS App "FASH" through multi-label multi-class classification

#### Kohyoung, Machine Intelligence Team Intern

Sep.2019 - Feb.2020

• Develop anomaly detection simulator through machine learning

## DHive, Deep Learning Developer

Sep.2019 - Jul.2020

- Study of Object Detection and Automatic Avoidance Algorithms in UAV
- Development of an emergency situation notification system in CCTV using object detection and optical flow

## KAIST Mad Camp, Participant

Dec.2018 - Feb.2019

- Develop live text editor using socket communication (Android, Java)
- Develop rhythm game "Rhythm is life" (Unity, C#)
- Develop racing game "Lego Racer" (Unity, C#)
- Develop song lyrics generation system through Char-RNN model (Tensorflow, Python)

## **PROJECTS**

## CMTP, KAIST CS470 Introduction to Artificial Intelligence

Fall 2020

• Develop vehicle trajectory prediction model using deep learning

# Zoomtopia, KAIST CS374 Introduction to HCI

Spring 2020

• Develop web page for short term room rental

## Dropfile, KAIST CS372 Natural Language Processing with Python

Spring 2020

• Develop system that automatically finds the directory for new downloaded files

## **LEADERSHIP**

## Graduate Student Representative, KAIST Computer Science

Mar. 2022 - Aug. 2022

Club President, KAIST Leadership Executing Team (K-LET)

Mar. 2021 - Aug. 2021

### **SKILLS**

Langauages Korean (Native), English (Middle)

**Programming Languages** Python, JavaScript, C, C++, C#, HTML/CSS, Kotlin, Swift

Frameworks Pytorch, Tensorflow, Docker, ReactJS