KUNHO KIM (김건호)

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Personal Page Github

EDUCATION

KAIST (Korea Advanced Institute of Science and Technology) *Mar.2022 - Feb.2024*
M.S. in Computer Science *Daejeon, South Korea*

- 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

* denotes equal contribution

[1] **As-Plausible-As-Possible: Plausibility-Aware Mesh Deformation Using 2D Diffusion Priors**
Seungwoo Yoo*, **Kunho Kim***, Vladimir Kim, Minhyuk Sung
Under Review

[2] **SyncDiffusion: Coherent Montage via Synchronized Joint Diffusions**
Yuseung Lee, **Kunho Kim**, Hyunjin Kim, Minhyuk Sung
NeurIPS 2023
[Project page] [Paper] [Code]

[3] **OptCtrlPoints: Optimizing Control Points for Biharmonic 3D Shape Deformation**
Kunho Kim*, Mikaela Angelina Uy*, Despoina Paschalidou, Alec Jacobson, Leonidas Guibas, Minhyuk Sung
Computer Graphics Forum (Proc. **Pacific Graphics 2023**)
[Project page] [Paper] [Code] [Video] [Slides]

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 on the 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 on the basic machine learning and data visualization

DHive, CUOP Intern *Jun.2019 - Aug.2019*

- Develop a modular AI prototype tool based on embedded OS using Docker – Object detection on 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 *Sep.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 (Unity)

KAIST ICN Lab, Outsourcing *Feb.2021 - Mar.2021*

- Develop an interactive software app for evaluating children's cognitive abilities (Android)

KAIST App Start-up Program, Excellent Prize *Dec.2020- Apr.2021*

- Deploy the weight management app "Minimum" (Design and iOS)

Naver AI Burning Day, Advance to the Finals *Feb.2020*

- Develop the personalized AI English tutor "MAMAGO" Using Naver translated Papago API

Prography, IT union club 5th member *Sep.2019 - Feb.2020*

- Deploy the weather based AI style coordination recommendation app "FASH" (iOS)

Kohyoung, Machine Intelligence Team Intern *Sep.2019 - Feb.2020*

- Develop an anomaly detection simulator through machine learning

DHive, Deep Learning Developer *Sep.2019 - Jul.2020*

- Study on object detection and automatic avoidance algorithms in UAV
- Develop an emergency situation notification system in CCTV using object detection and optical flow

KAIST Mad Camp, Participant *Dec.2018 - Feb.2019*

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

PROJECTS

CMTP, KAIST CS470 Introduction to Artificial Intelligence *Fall 2020*

- Develop a vehicle trajectory prediction model using deep learning

Zoomtopia, KAIST CS374 Introduction to HCI *Spring 2020*

- Develop the web page for short term room rental

Dropfile, KAIST CS372 Natural Language Processing with Python *Spring 2020*

- Develop the 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