Hyun Kang

(+82)10-2546-9947
hyun.kang@hotmail.com
https://korguy.github.io

PROFILE

Understanding Why, Innovating How

As a Master's student, I specialize in 3D vision/graphics and diffusion models. Driven by a deep curiosity to understand the 'why' behind complex problems, my self-motivation fuels my pursuit of innovative AI solutions that push technological boundaries.

EDUCATION

Yonsei University | MEng in Computer Science

Mar 2022 - July 2024 | Seoul, Korea

- Cumulative GPA: 4.11 / 4.50
- Advisor: Dr. In-Kwon Lee
- Research Areas: 3D Vision, Physical Simulation, Diffusion Models
- Thesis: "Diffusion Guidance Tuning with Semantic Decomposition"

Yonsei University | BEng in Computer Science

Mar 2018 - Feb 2022 | Seoul, Korea

- Cumulative GPA: 3.86 / 4.50

SKILLS

Technical Skills

- Main Language: Python (NumPy, PyTorch, Open3D)
- Web Development: React framework (Next.js)
- Miscellaneous: Linux Commands, Git, Shell Scripting, LaTeX

Soft Skills

- Effective Communication, Critical Thinking, Self-Motivation, Time Management
- Language: Korean (native), English (Proficient; TEPS: 474/600)

PUBLICATIONS

- **Hyun Kang**, Dohae Lee, Myungjin Shin, In-Kwon Lee. 2023. "Semantic Guidance Tuning for Text-To-Image Diffusion Models." arXiv preprint arXiv:2312.15964 (2023).
- Dohae Lee, **Hyun Kang**, and In-Kwon Lee. "ClothCombo: Modeling Inter-Cloth Interaction for Draping Multi-Layered Clothes." ACM Transactions on Graphics (TOG) 42.6 (2023): 1-13.

PROJECTS

Designing and Prototyping a Full-Body 3D Scanner

Dec 2021 - Mar 2022 | Solo Project

- (Hardware) Built a 3D scanner with extremely low budget ($2,000)
- (Software) Develop a pipeline for an automated 3D reconstruction and 3D segmentation for clothes

Part-Aware 3D Reconstruction of a Clothed Avatar from a Single Image

Jun 2021- Dec 2021 | Project Lead

- Develop a pipeline for 3D avatar reconstruction from a single view image and auto-rigging for animation

Detecting and Captioning Web Components

Jan 2021- Jun 2021 | Project Member

- Build a dataset and train an AI model to detect web components (such as banners, images, sidebar)
- Develop a web extension for detecting and captioning web components for better UX of blind people.

HONORS & AWARDS

Grand Prize | Yonsei Graduate Student Startup Competition

Sep 2023 | Project Lead

- Developed AI based 3D Body Shape Measurement Tool as a team "VBody"

Yonsei University Graduate School Scholarship

- Spring 2022, Fall 2022, Spring 2023, Fall 2023

Grand Prize | Dept. of Computer Science Capstone Project

Spring 2021, Fall 2021 | Project Lead

MISC.

TA of "OOP" & "Understanding AI and Using AI"

- Spring 2022, Fall 2023

YAI (Yonsei Artificial Intelligence)

Dec 2021 - Jun 2022 | Research Member

Virtual Fitting Start-up "Metown"

Mar 2022 - Feb 2024 | Research Member

- Research and summarize new virtual fitting technologies
- Promote "Metown" in Singapore and France

INTERESTS

- Fashion & Art
- Reading Books