Inbum Park

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Research Interests

Computer Vision, Computational Imaging, Computer Graphics

Education

University of Michigan Ann Arbor, MI

Master of Science in Electrical and Computer Engineering *Aug. 2023 – Present*

- Specialization: Computer Vision

Seoul National University (SNU) Seoul, South Korea

Bachelor of Science in Electrical and Computer Engineering *Mar. 2017 – Aug. 2023*

Publications

On the Robustness of Normalizing Flows for Inverse Problems in Imaging
Seongmin Hong, **Inbum Park**, Se Young Chun.
International Conference on Computer Vision (ICCV), 2023.

Text2PointCloud: Text-Driven Stylization for Sparse PointCloud
Inwoo Hwang, Hyeonwoo Kim, Donggeun Lim, **Inbum Park**, Youngmin Kim.
Eurographics (Short Papers), 2023.

Probabilistic Implicit Scene Completion
Dongsu Zhang, Changwoon Choi, **Inbum Park**, Youngmin Kim.
International Conference on Learning Representations (ICLR), 2022 (Spotlight).

Experiences

University of Michigan Ann Arbor, MI

Research Intern, advised by Prof. Andrew Owens *Sep. 2023 – Present*

- Leveraging generative models to generate images of diverse topics of interest.

Seoul National University (SNU) Seoul, South Korea

Research Intern at Intelligent Motion Lab, advised by Prof. Jungdam Won *Jan. 2023 – May. 2023*

- Programmed kinematics, handling mocap data, and learned motion matching to better understand the technical components of computer graphics and animation.
- Applied a recent 3D pose reconstruction model to a video of a patient to perform gait analysis.

Research Intern at Intelligent Computational imaging Lab, advised by Prof. Se Young Chun *Fall 2022*

- Investigated the phenomenon of erroneous images occasionally generated from flow-based models and explained the causes through experiments on inverse problems in imaging, such as super resolution and low light image enhancement.
- Published the paper "On the Robustness of Normalizing Flows for Inverse Problems in Imaging" to the *International Conference on Computer Vision* as a second author.

Research Intern at 3D Vision Lab, advised by Prof. Young Min Kim *Feb. 2021 – Sep. 2021*

- Conducted experiment on a probabilistic approach to shape completion and scene reconstruction using 3D implicit representations.
- Published the paper "Probabilistic Implicit Scene Completion" to the *International Conference on Learning Representations* as a third author and received a spotlight session.

Samsung Electronics Seoul, South Korea

Research Intern at Video Display Department *Jul. 2021 – Aug. 2021*

- Utilized photorealistic style transfer named WCT2 to recreate experiences of the abnormalities in constantly changing TV screens, including blurry, shaky, glitchy, and pixelated effects.
- Devised a sign language translating smart watch for people with hearing disabilities to reduce the burden of communication among the crowd.

Extracurriculars

University of Michigan Ann Arbor, MI

Grader of EECS 442: Computer Vision *Sep. 2023 – Dec. 2023*

Seoul National University (SNU) Seoul, South Korea

SNU Choreography Dance Club HONDDONI *Mar. 2017 – Aug. 2023*

- As an executive member in 2018, led a crew of 40 people for a self-organized show held in campus.

SNU Tomorrow's Edge Membership *Sep. 2021 – Feb. 2023*

- As an executive member in 2022, led a mentoring project for high school students and university freshmen and sophomores on topics related to engineering.

Introduction to Data Structures Tutor *Sep. 2022 – Dec. 2022*

SNU Tennis Club Impact *Mar. 2022 – Dec. 2022*

SNU Rocket Club HANARO *Sep. 2018 – Jul. 2019*

Skills

Programming Skills: Python, C/C++, Matlab, JavaScript, HTML/CSS

Languages: Fluent - English, Korean, Conversational - Italian, French
GRE General Test; Verbal 164 / Quant 170 / Writing 5.0
TOEFL IBT; Reading 29 / Listening 28 / Writing 27 / Speaking 26
HSK 4-级 achieved

Developer Tools: CloudCompare, MeshLab, Mitsuba Renderer, Jupyter Notebook, Git, VS Code