CHANGWOON CHOI

Curriculum Vitae

Ph.D. Candidate changwoon.choi00@gmail.com

Room 916, Building 301, 1 Gwanak-ro http://github.com/changwoonchoi

Education

Seoul Science High School Jongro-gu, Seoul - 2011 - 2013

Seoul National University Gwanak-gu, Seoul Electrical & B.S., summa cum laude,

Computer Engineering (GPA: 4.09 / 4.3)

2014 - 2020

Seoul National University Gwanak-gu, Seoul ECE M.S., 2020 - 2022 Seoul National University Gwanak-gu, Seoul ECE Ph.D., 2022 - Present

Publications

1. Junho Kim, Hojun Jang, Changwoon Choi, and Young Min Kim, CPO: Change Robust Panorama to Point Cloud Localization, in European Conference on Computer Vision (2022).

- 2. Dongsu Zhang, **Changwoon Choi**, Inbum Park, and Young Min Kim, **Probabilistic Implicit Scene Completion**, in *International Conference on Learning Representations* (2022, *Spotlight*).
- 3. Junho Kim, Changwoon Choi, Hojun Jang, and Young Min Kim, PICCOLO: Point Cloud-Centric Omnidirectional Localization, in *International Conference on Computer Vision* (2021).
- 4. Dongsu Zhang, Changwoon Choi, Jeonghwan Kim, and Young Min Kim, Learning to Generate 3D Shapes with Generative Cellular Automata, in *International Conference on Learning Representations* (2021).

Ongoing Projects

- · IBL-NeRF: Image-Based Lighting Formulation of Neural Radiance Fields with Prefiltered Radiance Fields (Submitted)
- · Implicit Neural Representation Reconstruction for Real-world Indoor Scene
- · Spherical Binoctree Structure for Reconstructing Neural Radiance Fields with 360 Camera

Honors and Awards

Funding for gifted students (science), Woongjin Foundation

2011 - 2012

Merit-based Scholarship (Seoul National University, Full-Funding)

Samsung Humantech Paper Award 2021, Honorable Mention (\$2,000)

2021

Invited Talks

"Towards Robust Indoor Visual Localization with Omnidirectional Camera" @42dot (2022.05.)

Academic Activities

Conference Reviewer: ECCV 2022, 3DV 2022

Teaching Experience

Basic Calculus 1 (Tutor)

Basic Calculus 2 (Tutor)

Basic Physics 1 (Tutor)

Basic Physics 2 (Tutor)

Programming Methodology (Tutor)

Engineering Mathematics 2 (Tutor)

Signals and Systems (Tutor)

Theory and Lab of IoT, AI, and Big Data (T.A.)

Signals and Systems (T.A.)

3D Computer Vision Track for AI Experts (Samsung) (T.A.)

Introduction to Random Variables and Processes (T.A.)

2015, 2016, 2018, 2020 spring

2018 fall

2015, 2016, 2019 spring

2015, 2019 fall

2019 fall

2019 fall, 2021 spring

2020 spring

2019 fall, 2020 spring

2021 spring

2021, 2022 summer

2022 spring