

CHANGWOON CHOI

Curriculum Vitae

Ph.D. Candidate

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🏠 <http://3d.snu.ac.kr/>

🔄 <http://github.com/changwoonchoi>

🎓 [Google Scholar Link](#)

Education

Seoul Science High School	Jongro-gu, Seoul	-	2011 - 2013
Seoul National University	Gwanak-gu, Seoul	Electrical & Computer Engineering	B.S., <i>summa cum laude</i> , (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)	2015 - 2020
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
Student Volunteer : SIGGRAPHASIA 2022

Teaching Experience

Basic Calculus 1 (Tutor)	2015, 2016, 2018, 2020 spring
Basic Calculus 2 (Tutor)	2018 fall
Basic Physics 1 (Tutor)	2015, 2016, 2019 spring
Basic Physics 2 (Tutor)	2015, 2019 fall
Programming Methodology (Tutor)	2019 fall
Engineering Mathematics 2 (Tutor)	2019 fall, 2021 spring
Signals and Systems (Tutor)	2020 spring
Theory and Lab of IoT, AI, and Big Data (T.A.)	2019 fall, 2020 spring
Signals and Systems (T.A.)	2021 spring
3D Computer Vision Track for AI Experts (Samsung) (T.A.)	2021, 2022 summer
Introduction to Random Variables and Processes (T.A.)	2022 spring