

CHANGWOON CHOI

Curriculum Vitae

Ph.D. Candidate

Seoul National University

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🏠 <http://changwoon.me>

🔄 <http://github.com/changwoonchoi>

🎓 [Google Scholar Link](#)

Education

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|---------------------------|------------------|-----------------------------------|---|
| 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

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| 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

Teaching Experience

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| 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 |
| Physics Lab (T.A.) | 2022 fall |