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Chaerin Min

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Providence, RI 02912

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https://chaerinmin.github.io/

EDUCATION

Brown University, Providence, RI, United States — Sep. 2023 – Present

Ph.D. student in Computer Science
Advisor: Prof. Srinath Sridhar
GPA 4.0/4.0

Hanyang University (HYU), Seoul, South Korea — Sep. 2021 – Aug.2023

M.S. in Computer Science
Thesis: Neural Implicit Surfaces for Large Scenes using Valid Region Sampling
Advisor: Prof. Jongwoo Lim
GPA 4.5/4.5

University of Seoul (UOS), Seoul, South Korea — Mar. 2017 – Aug. 2021

B.S. in Electrical and Computer Engineering
GPA 4.3/4.5 (ranked 2/64)

RESEARCH INTERESTS

- Computer Vision in 3D
- Interaction between 3D/4D scenes, objects and humans

PUBLICATIONS

Chaerin Min, Srinath Sridhar, "GenHeld: Generating and Editing HandHeld Objects". (under review)

Kefan Chen, **Chaerin Min**, Linguang Zhang, Shreyas Hampali, Cem Keskin, and Srinath Sridhar, "HanDifformer: Conditional Hand Image Generation with Spatially-Aligned Diffusion". (under review)

Chaerin Min*, Sehyun Cha*, Changhee Won, and Jongwoo Lim, "Fast Spatial Reasoning of Implicit 3D maps through Explicit Near-Far Sampling Range Prediction", IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2024.

Chaerin Min, Taehyun Kim, and Jongwoo Lim, "Meta-Learning for Adaptation of Deep Optical Flow Networks", Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), 2023.

RESEARCH EXPERIENCE

Research Assistant **at Interactive 3D Vision and Learning Lab., Brown University** — Sep. 2023 – Present

- Interaction between 3D human, objects, and scenes.

Research Assistant **at Computer Vision Lab., Hanyang University** — Sep. 2021 – Aug.2023

- Volumetric Environment Reconstruction Formulation Fused with Geometric Information

- Meta-learning Algorithm for Fast Adaptation in New Domains

- Robust Pose Estimation and 3D Reconstruction Algorithm by Fusing Event Camera, IMU, and Deep Learning in Extreme Conditions.

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***Research Intern* at Machine Learning and Vision Lab., Korea University** Jan. 2021 –Feb. 2021

- 3D semantic vision

***Research Intern* at Intelligent Media Lab., Korea University** Jun. 2020 – Aug. 2020

- Low-Level Vision, Super-resolution

PROFESSIONAL EXPERIENCE

Samsung Electronics, Seoul, Korea
Teaching Assistant Jul. 2023 – Jul. 2023

- Led an intensive one-day lab course for the AI Expert program

Multipleye Co., Seoul, Korea
Research Intern Aug. 2021 – Aug. 2021

- Created a learning method for estimating motion using events

Research Intern Sep. 2022 – Jun. 2023

- Improved the 3D reconstruction model for a large-scale multi-camera setup

COMMUNITY SERVICES

- Served as a reviewer for CVPR 2024

TEACHING EXPERIENCE

- *Graduate Teaching Assistant*, Graduate School of Applied Artificial Intelligence, Hanyang University

  Mar. 2023 – Aug. 2023

  - Computer Vision (Spring 2023)

- *Graduate Teaching Assistant*, Graduate School of Applied Artificial Intelligence, Hanyang University

  Mar. 2022 – Aug. 2022

  - Computer Vision (Spring 2022)

- *Undergraduate Tutor,* College of Liberal Arts and Cross-Disciplinary Studies, University of Seoul

  Sep. 2019 – Dec. 2019

  - CalculusⅡ (Fall 2019)

AWARDS & HONORS

- NASA EPSCoR, United States (Sep. 2023 – Jan. 2024) 17k USD
- *LG Electronics Fellowship,* LGE Vehicle Component Solutions, Korea (Mar. 2023 – Aug. 2023) 9M KRW
- *BrainKorea21*, National Research Foundation of Korea, Korea (Sep. 2021 – Aug. 2023) 26M KRW
- *ISEP Exchange*, ISEP, United States (Jan. 2020 – Jun. 2020) 21K USD

- *Scholarship for Excellent Achievement,* University of Seoul, Korea (Sep. 2019 – Dec.2019)
  Half tuition waiver as 650K KRW
- *Scholarship for Undergraduate Tutors,* University Innovation Support Project, Korea (Sep. 2019 – Dec. 2019)
  1M KRW
- *Merit-based Seongnam Scholarship for high school students*, Seongnam Scholarship Foundation, Korea (2016)
  Tuition waiver for 1 year as 1.5M KRW

PATENTS

- "Learning method, learning device for estimating results of pose variation of camera using time series e vents and testing method, testing device using the same", C. Won, **C. Min**, H. Seok, KR-Registration No. 10-2372988

OTHER EDUCATIONAL BACKGROUND

Louisiana State University (LSU), Baton Rouge, LA, United States Jan. 2020 – Jun. 2020

Exchange Student in Electrical and Computer Engineering
GPA 4.0/4.0

EXTRACURRICULAR ACTIVITIES

- Asia Pacific Youth Exchange Aug. 2019 – Aug. 2019
  - Promoted sustainable development goals and multiculturalism in local communities
- Volunteer: Disability Services at Louisiana State University Jan. 2020 – May. 2020
- Programming Languages: Python, PyTorch, CUDA, C/C++, TensorFlow, Java, HTML, Pyret, LaTeX
- Languages: Korean (native fluency), English (professional fluency)