# Chaerin Min

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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*

**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, Deep Learning
- 3D from multi-view, 3D from single images, Meta-Learning, Optical Flow

## PUBLICATIONS

Kefan Chen, **Chaerin Min**, Linguang Zhang, Shreyas Hampali, Cem Keskin, and Srinath Sridhar, "Drawing Hands with Generative Models", 2023 (under review)

**Chaerin Min***, Sehyun Cha*, Changhee Won, and Jongwoo Lim, "TSDF-Sampling: Efficient Sampling for Neural Surface Field using Truncated Signed Distance Field", ArXiv 2023. (under review)

**Chaerin Min**, Taehyun Kim, and Jongwoo Lim, "Meta-Learning for Adaptation of Deep Optical Flow Networks", Winter Conference on Applications on Computer Vision (WACV), 2023.
[acceptance rate 29.1%]

## RESEARCH EXPERIENCE

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

- Single Image 3D Generation using Foundation Models

***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

## 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)