Eunsue Choi

Email: ches7283@postech.ac.kr   **Homepage**: www.eschoi.com   **Phone**: (+82) 10-9414-7283

Research interests	Computational Imaging, Wave Optics, Metasurfaces, End-to-end optimization, Computer Vision, Computer Graphics, Cameras, Displays, lenses and Sensing, VR/AR

Education

POSTECH   Pohang, S.Korea
MS-PhD in Computer Science and Engineering   Sep.2022 – Present
Advisor: Dr. Seung-Hwan Baek

POSTECH   Pohang, S.Korea
BS in Computer Science and Engineering   Mar.2018 – Aug.2022
Graduated with Magna Cum Laude

Chungnam Science High School   Gongju, S.Korea
Early Graduation   Mar.2016 – Feb.2018

Honors and Awards

Outstanding M.S. Thesis Award, Korea Computer Graphics Society	2024
Alchemist R&D Fellowship, POSTECH	2024
Outstanding Interdisplinary Research Award, POSTECH	2024
Finalist, DEFCON 27th CTF Hacking Competition World Final	2019

Publications

[1] **360° Structured Light with Learned Metasurfaces [Link]**
Eunsue Choi*, Gyeongtae Kim*, JooyeongYun, Yujin Jeon, Junsuk Rho+, Seung-Hwan Baek+
Nature Photonics, 2024.
* Featured in Nature Computational Science's special issue, highlighted in editorial and research highlights

[2] **Spectral and Polarization Vision: Spectro-polarimetric Real-world Dataset [Link]**
Yujin Jeon*, **Eunsue Choi***, Youngchan Kim, Yunseong Moon, Khalid Omer, Felix Heide, Seung-Hwan Baek, (* equal contributions)
CVPR 2024, **highlight**

[3] **Limitations of Hyperspectral Imaging from RGB Images: A Data Perspective [Link]**
Qiang Fu, Matheus Souza, **Eunsue Choi**, Suhyun Shin, Seung-Hwan Baek, Wolfgang Heidrich
Computational Optical Sensing and Imaging, Optica, 2024

Talks	**Seeing beyond conventional light with wave optics**	
	Korea Computer Graphics Society, Award Talk	July.2024

Teaching experience	Teaching assistant, Data Structure, POSTECH	Spring 2024
	Teaching assistant, Data Structure, POSTECH	Fall 2023