

SUYEON CHOI

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EDUCATION

Stanford University

Ph.D. in Electrical Engineering

Sep 2020 –

Master of Science in Electrical Engineering

Sep 2019 –

Seoul National University

Mar 2013 – Feb 2019

Bachelor of Science in Electrical and Computer Engineering, summa cum laude

2-year absence to fulfill military duty (Aug 2015 – May 2017)

Seoul Science High School

Mar 2010 – Feb 2013

The school for gifted students

PUBLICATIONS

- [6] **S. Choi**, J. Kim, Y. Peng, and G. Wetzstein “Optimizing image quality for holographic near-eye displays with Michelson Holography”, *Optica*, **8**(2) (2021);
- [5] Y. Peng, **S. Choi**, N. Padmanaban, and G. Wetzstein “Neural Holography with Camera-in-the-loop Training”, *ACM Trans. Graph.* **39**(6), 185, (SIGGRAPH Asia 2020);
- [4] D. Yoo†, S. Lee†, Y. Jo, J. Cho, **S. Choi**, and B. Lee “Volumetric Head-Mounted Display with Locally Adaptive Focal Blocks”, *IEEE Transactions on Visualization and Computer Graphics* (2020);
- [3] Y. Jo†, S. Lee†, D. Yoo, **S. Choi**, D. Kim, and B. Lee, “Tomographic Projector: Large Scale Volumetric Display with Uniform Viewing Experiences”, *ACM Trans. Graph.* **38**(6), 215, (SIGGRAPH Asia 2019);
- [2] **S. Choi**, S. Lee, Y. Jo, D. Yoo, D. Kim, and B. Lee, “Optimal Binary Representation via Non-convex Optimization on Tomographic Displays”, *Opt. Express* **27**(17), 24362-24381 (2019);
- [1] D. Yoo†, S. Lee†, Y. Jo, J. Cho, **S. Choi**, and B. Lee, “15 focal planes head-mounted display using LED array backlight”, *Proc. SPIE 11040, Optical Design Challenge 2019, (SPIE Photonics West 2019)*;

RESEARCH EXPERIENCE

Computational Imaging Lab, Stanford University

Graduate Research Assistant (Advisor : Professor Gordon Wetzstein)

Sep 2019 –

Optical Engineering and Quantum Electronics Laboratory, Seoul National University

Research Assistant Intern (Advisor : Professor Byounggho Lee)

2017, Jun 2018 – Jul 2019

Virtual Machine & Optimization Lab, Seoul National University

Undergraduate Research Project (Advisor : Professor Soo-Mook Moon)

Jan 2018 – Jun 2018

WORK EXPERIENCE

NVIDIA Research

New Experience Team

Jul 2020 – Sep 2020

Cyber Bureau, Korean National Police Agency

Cybercrime Investigation Planning Team

Mar 2016 – May 2017

Sway Mobile, Inc
Software Internship

Jan 2015 – Feb 2015

Samsung SDS
Samsung SDS sGen Club, Software Internship Program

Aug 2013 – Aug 2015

TALKS

Towards high-quality holographic displays, *SPIE AR,VR,MR Technical Talks* 2021.3
Neural Holography, *The Graphics and Mixed Environment Seminar (GAMES) Webinar* 2020.12

AWARDS AND SCHOLARSHIPS

Grand Prize in Blockchain technology contest, *LINE X Korean Institute of Information Sci. and Eng.* 2018
\$3,000 as awards, participated with *Gitchain* project.

Bronze Medal in the University Students Mathematics Contest, *the Korean Mathematical Society* 2016

Silver Medal in the **International Physics Olympiad (IPhO)** 2012

Gold Medal in both the Korean Mathematical/Physics Olympiad 2009/2008 respectively

Kwanjeong Scholarship, *Kwanjeong Foundation* 2019 – 2024
Scholarship for students in Korea to study abroad at graduate school.

Government Scholarship for Overseas Study, *Korea government* 2019 – 2021
Scholarship for students in Korea to study abroad at graduate school. (for MSc study)

Presidential Science Scholarship, *Korea Student Aid Foundation* 2013 – 2018
Full tuition and additional stipends (\$5,000 / year) for academic excellence.

Youth Scholarship, *Woongjin Foundation* 2012

Yongwoon Ph.D. Scholarship, *Yongwoon Foundation* 2019
Declined due to the period overlap with Kwanjeong and NIIDE Scholarships

TEACHING

Course Assistant
EE267: Virtual Reality, *Stanford University* Spring 2021

Undergraduate Teaching Assistant
Digital Systems Design and Experiments, *College of Engineering, Seoul National University* Fall 2018
Introduction to Electromagnetism, *College of Engineering, Seoul National University* Fall 2017
Introduction to Circuit Theory and Laboratory, *College of Engineering, Seoul National University* Spring 2015
Digital Logic Design and Lab, *College of Engineering, Seoul National University* Fall 2014

Tutor
Basic Physics, *Dept. of Physics, Seoul National University* Fall 2014, Spring 2015, 2018

SERVICES

Reviewer, *OSA Optics Express* 2019 –
Reviewer, *IEEE ISMAR* 2020
Student Member, *ACM SIGGRAPH* 2020 –
Qualcomm IT Tour, *Qualcomm, San Diego* Aug 2017
Crime Prevention Police Company, *Seoul Eunpyeong Police Station* Sep 2015 – Mar 2016
Seoul National University Children's Hospital, SNUH Jul 2013 – Jul 2015
Freshman Mentor, *Dept. of ECE, SNU* 2014