

Zheng Shi

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Education History

- 2018 - Present PhD Candidate in Computer Science, advised by Prof. Felix Heide
Princeton University, Princeton, NJ
- 2014 - 2018 Sc.B. in Applied Mathematics, with Honor, *Magna Cum Laude*
Brown University, Providence, RI

Academic Honors

- 2018 **Recipient of Rohn Truell Prize**
Annual award to the most outstanding member of the graduating class concentrating in Applied Mathematics at Brown University

Research Interests:

My research interests are in machine learning for computer vision and computer graphics. I am currently working on developing specialized optics such as diffractive optical elements (DOEs) with end-to-end optimization methods, and vision under harsh conditions.

Publications

- 2022 **Seeing Through Obstructions with Diffractive Cloaking**
Zheng Shi, Yuval Bahat, Seung-Hwan Baek, Qiang Fu, Hadi Amata, Xiao Li, Praneeth Chakravarthula, Wolfgang Heidrich, Felix Heide
SIGGRAPH 2022
- 2021 **Centimeter-Wave Free-Space Time-of-Flight Imaging**
Seung-Hwan Baek, Noah Walsh, Ilya Chugunov, **Zheng Shi**, Felix Heide
ACM Transactions on Graphics (ToG), presented at *SIGGRAPH 2022*
- 2021 **Low-Cost SPAD Sensing for Non-Line-Of-Sight Tracking, Material Classification and Depth Imaging**
Clara Callenberg, **Zheng Shi**, Felix Heide, Matthias B. Hullin
SIGGRAPH 2021
- 2021 **ZeroScatter: Domain Transfer for Long Distance Imaging and Vision through Scattering Media**
Zheng Shi*, Ethan Tseng*, Mario Bijelic*, Werner Ritter, Felix Heide
CVPR 2021

Experience

- 2022 **Research Intern at Meta Reality Labs**
- 2017 **Data Scientist Intern at Facebook Search Whole Page Ranking Team**
- 2016 **Data Analytics Intern at Facebook Core Ads Team**

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Teaching

2020 - 2021 **Graduate Assistant Instructor at Princeton University**

- COS426: Computer Graphics, *Spring 2021*
- SML201: Introduction to Data Science, *Fall 2020, Spring 2020, Fall 2021*

2016 **Math Group Tutor for Linear Algebra and Honor Calculus at Brown University**

2015 **Grader for Introductory Calculus and Linear Algebra of Brown University**

Outreach

2020 **20K Inspirational Stories Contributor – Día de la Ciencia**

Skills

Python, TensorFlow, PyTorch, MATLAB, R, SQL, LaTeX, Git