BENJAMIN ATTAL

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EDUCATION

Carnegie Mellon Robotics Institute *September 2019 - May 2025 (Expected)*
Ph.D. in Robotics GPA : 4.0

Brown University *September 2014 - May 2019*
B.S. in Applied Math and Computer Science, M.S. in Applied Math GPA (within major): 3.9

RELEVANT WORK EXPERIENCE

Google Research (w/ Pratul Srinivasan) Summer 2023
PhD Student Researcher

Facebook Computational Photography (w/ Changil Kim) Summer 2021, 2022
PhD Student Research Intern

CMU Light Transport Lab (w/ Matt O'Toole) Fall 2019 - Present
PhD Student

Brown Visual Computing Lab (w/ James Tompkin) Fall 2018 - Fall 2019
Student Researcher

Light Fall 2018 - Spring 2019
Student Research Intern

AWARDS

Uber Fellowship 2021

Meta Fellowship 2023
AR/VR Computer Graphics

SELECTED PUBLICATIONS

Flash Cache: Reducing Bias in Radiance Cache Based Inverse Rendering.
Benjamin Attal, Dor Verbin, Ben Mildenhall, Peter Hedman, Jon Barron, Matt O'Toole, Pratul Srinivasan.
ECCV 2024 (Oral)

Flowed Time of Flight Radiance Fields.
Mikhail Okunev*, Marc Mapeke*, **Benjamin Attal**, Christian Richardt, Matt O'Toole, James Tompkin.
ECCV 2024

Neural Fields for Structured Lighting.
Aarushi Shandilya, **Benjamin Attal**, Christian Richardt, James Tompkin, Matt O'Toole.
ICCV 2023

HyperReel: High-Fidelity 6-DoF Video with Ray-Conditioned Sampling.
Benjamin Attal, Jia-Bin Huang, Christian Richardt, Michael Zollhöfer, Johannes Kopf, Matthew O'Toole, Changil Kim.
CVPR 2023 (Highlight)

Learning Neural Light Fields with Ray-Space Embedding Networks.
Benjamin Attal, Jia-Bin Huang, Michael Zollhöfer, Johannes Kopf, Changil Kim.
CVPR 2022

Towards Mixed-State Coded Diffraction Imaging.
Benjamin Attal, Matt O'Toole.
IEEE Transactions on Pattern Analysis and Machine Intelligence 2022.

TöRF: Time-of-Flight Radiance Fields for Dynamic Scene View Synthesis.
Benjamin Attal, Eliot Laidlaw, Aaron Gokaslan, Changil Kim, Christian Richardt, James Tompkin, Matt O'Toole.
NeurIPS 2021

MatryODShka: Real-time 6DoF Video View Synthesis using Multi-Sphere Images.
Benjamin Attal, Selena Ling, Aaron Gokaslan, Christian Richardt, James Tompkin.
ECCV 2020 (Oral)

TALKS

Towards Mixed-State Coded Diffraction Imaging Summer 2022

ICCP 2022 (Oral)

Learning Neural Light Fields with Ray-Space Embedding Networks Spring 2022

Google (Invited)

Real-time 6DoF Video View Synthesis using Multi-Sphere Images Summer 2020

ECCV 2020 (Oral)

SERVICE

Reviewer

- SIGGRAPH
- CVPR
- NeurIPS
- ICCV, ECCV
- ACM Transactions on Graphics
- Computer Graphics Forum

TEACHING

Teaching Assistant

- Computer Vision (CMU 16385)
- Learning for 3D Vision (CMU 16889)
- Computer Graphics (Brown University CSCI 1230)
- 2D Game Engine Development (Brown University CSCI 1950N)

Head Teaching Assistant

- 3D Game Engine Development (Brown University CSCI 1950U)