

Alexander (Zander) Majercik

majercik@stanford.edu
Website

Last update on October 27, 2025

Education

Stanford University

PhD

Research focus: Accelerated simulation for reinforcement learning in games.
Adviser: Kayvon Fatahalian

STANFORD, CA
September 2023 – Present

Williams College

B.A. cum laude with Honors in Computer Science

GPA: 3.77

Thesis: rvv: An Intuitive and Principled Version Control System

Adviser: Morgan McGuire

WILLIAMSTOWN, MA
2013-2017

Experience

ROBLOX Research

Research Intern

Developed high throughput game abstractions for learning character control. Designed and implemented pipelines for LLM behavior generation.

SAN MATEO, CA
Summer 2024, 2025

NVIDIA Research

Research Scientist

Published multiple papers on real-time global illumination, which formed the foundation of the [NVIDIA RTXGI SDK](#).

SANTA CLARA, CA
July 2020 – August 2023

Research Engineer

Designed novel rendering algorithms with a focus on GPU ray tracing.
Accelerated deep learning inference on multiple chips.
Engineered software infrastructure for computer graphics and vision science experiments.
Promoted July 2019.

June 2018 – July 2020

Research Intern

Researched AI and computer graphics techniques for VR/AR. Developed research infrastructure for computer vision experiments and GPU ray tracing.

June 2017 – June 2018

Selected Publications

- Vishnu Sarukkai, Brennan Shacklett, **Zander Majercik**, Kush Bhatia, Christopher Ré, & Kayvon Fatahalian. (2024). Automated Rewards via LLM-Generated Progress Functions. <https://arxiv.org/abs/2410.09187>
 - Vining, N., **Majercik, A.**, Gu, F., Takikawa, T., Trusty, T., Lalonde, P., McGuire, M., & Sheffer, A. (2025). FastAtlas: Real-Time Compact Atlases for Texture Space Shading. Computer Graphics Forum (Proc. Eurographics 2025), 44(2). <https://www.cs.ubc.ca/labs/imager/tr/2025/fastatlas/>
 - Majercik, Z.**, Müller, T., Keller, A., Nowrouzezahrai, D. and McGuire, M. (2022), Dynamic Diffuse Global Illumination Resampling. Computer Graphics Forum, 41: 158-171. <https://doi.org/10.1111/cgf.14427>
 - Zander Majercik**, Adam Marrs, Josef Spjut, and Morgan McGuire, Scaling Probe-Based Real-Time Dynamic Global Illumination for Production, Journal of Computer Graphics Techniques (JCGT), vol. 10, no. 2, 1-29, 2021 Available online <http://jcgt.org/published/0010/02/01/>
 - Zander Majercik**, Jean-Philippe Guertin, Derek Nowrouzezahrai, and Morgan McGuire, Dynamic Diffuse Global Illumination with Ray-Traced Irradiance Fields, Journal of Computer Graphics Techniques (JCGT), vol. 8, no. 2, 1-30, 2019 <https://jcgt.org/published/0008/02/01/>
 - Jonghyun Kim, Youngmo Jeong, Michael Stengel, Kaan Aksit, Rachel Albert, Ben Boudaoud, Trey Greer, Joohwan Kim, Ward Lopes, **Zander Majercik**, Peter Shirley, Josef Spjut, Morgan McGuire, and David Luebke. 2019. Foveated AR: Dynamically-Foveated Augmented Reality Display. ACM Trans. Graph. 38, 4, Article 99 (July 2019), 15 pages. <https://doi.org/10.1145/3306346.3322987>
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