# Guangyan Cai

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## Education

**University of California, Irvine** <div align="right">**Irvine, CA**</div>
*Ph.D in Computer Science* <div align="right">*2020–Present*</div>
o Supervisor: Shuang Zhao

**University of California, San Diego** <div align="right">**La Jolla, CA**</div>
*B.S. in Computer Science* <div align="right">*2016–2020*</div>
o Supervisor: Ravi Ramamoorthi
o Cumulative GPA: 3.6 / 4.0 (Major GPA: 3.9 / 4.0)
o Undergraduate Awards for Excellence in Research: 2020
o Provost's Honors: 2016-2020

## Publications

[1]   Lifan Wu, **Guangyan Cai**, Ravi Ramamoorthi, and Shuang Zhao. 2020. Analytic spherical harmonic gradients for real-time rendering with many polygonal area lights. *ACM Trans. Graph.*, 39, 4, (July 2020). Presented at SIGGRAPH 2020.

[2]   Lifan Wu*, **Guangyan Cai***, Ravi Ramamoorthi, and Shuang Zhao. 2021. Differentiable time-gated rendering. *ACM Trans. Graph.*, 40, 6, (December 2021). Presented at SIGGRAPH Asia 2021.

## Reviewer

**Eurographics**: 2022

## Teaching

**CS112 Introduction to Computer Graphics**: TA <div align="right">*2021 Fall, UCI*</div>
**CS143A Principles of Operating Systems**: TA <div align="right">*2021 Spring, UCI*</div>
**CS143B Project in Operating System Organization**: TA <div align="right">*2021 Winter, UCI*</div>
**CS143B Project in Operating System Organization**: Reader <div align="right">*2020 Fall, UCI*</div>
**CSE168 Computer Graphics II - Rendering**: Tutor <div align="right">*2020 Spring, UCSD*</div>
**CSE167 Computer Graphics**: Tutor <div align="right">*2019 Fall & 2020 Winter, UCSD*</div>

## Skills

**Programming Languages**: C++, Python, Java, LaTeX

**Software and Applications**: NumPy, PyTorch, Matplotlib, Enoki, Mitsuba, Blender