

# Shlomi Steinberg

COMPUTER SCIENCE PHD CANDIDATE — UC SANTA BARBARA

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🌐 <https://ssteinberg.xyz>

## EDUCATION

### UC Santa Barbara PHD, COMPUTER SCIENCE

2019 - present

Cum. GPA: 3.85 / 4.0

Advisor: Prof. Lingqi Yan.

### Weizmann Institute of Science

### MSC, MATHEMATICS AND COMPUTER SCIENCE

2015 - 2017 • Israel

Thesis: "Distributed Behavioral Programming".

Advisor: Prof. David Harel.

### Open University BSc, MATHEMATICS AND COMPUTER SCIENCE

2011 - 2015 • Israel

Thesis: "Ambient Occlusion with Screen Space Cone Tracing"

## AWARDS

### NVIDIA Ph.D. Fellowship

2022 - 2023

## SKILLS

### 🔗 Engineering

Experience with software engineering for a large variety of systems and hardware, including embedded, GPUs and airborne systems.

Fluent in modern C++, latest standards.

🌐 <https://github.com/ssteinberg>

### 🗣 Languages

English • Hebrew • Russian • German (elementary) • Mandarin (elementary)

## SELECT PUBLICATIONS

### Towards Practical Physical-Optics Rendering

STEINBERG S., P. SEN, YAN L.

ACM Transactions on Graphics (Proceedings of SIGGRAPH 2022)

• Jul 2022

### Two-Mirror Compact System for Ideal Concentration of Diffuse Light

STEINBERG S., N. BOKOR, N. DAVIDSON

Journal of the Optical Society of America A

• Mar 2022

### Physical Light-Matter Interaction in Hermite-Gauss Space

STEINBERG S., YAN L.

ACM Transactions on Graphics (Proceedings of SIGGRAPH ASIA 2021)

• Nov 2021

### A Generic Framework for Physical Light Transport

STEINBERG S., YAN L.

ACM Transactions on Graphics (Proceedings of SIGGRAPH 2021)

• Jul 2021

### Rendering of Subjective Speckle Formed by Rough Statistical Surfaces

STEINBERG S., YAN L.

ACM Transactions on Graphics

• Feb 2022

### Accurate Rendering of Liquid-Crystals and Inhomogeneous Optically Anisotropic Media

STEINBERG S.

ACM Transactions on Graphics

• Apr 2020

### Analytic Spectral Integration of Birefringence-Induced Iridescence

STEINBERG S.

Eurographics Symposium on Rendering 2019

• Jul 2019

### Distributing Scenario-Based Models: A Replicate-and-Project Approach

STEINBERG S., GREENYER J., GRITZNER D., HAREL D., KATZ G. AND MARRON A.

MODELSWARD 2017

• Feb 2017

See <https://ssteinberg.xyz/publications/> for a full list.

## INDUSTRY

### Crytek | RENDERING ENGINEER

Nov 2017 - Jun 2019 | Frankfurt, Germany

- Part of the rendering team working on and responsible for the rendering engine underlying CryEngine5, as well as Hunt: Showdown, an AAA title that was successfully released as an early-access title.
- Responsible for research and development of multi-layered materials, including thin-film interference, and material models that faithfully reproduce the appearance of conductors.