### Jared Hoberock

CONTACT Information

(417) 684-0191 | jaredhoberock [at] gmail [dot] com

Professional Interests Parallel programming, functional programming, photorealistic rendering, API design, C++

EDUCATION

University of Illinois Urbana-Champaign, Urbana, Illinois

Ph.D., Computer Science, August 2008

University of Missouri-Columbia, Columbia, Missouri B.S., Computer Engineering, 2002, Summa Cum Laude

Professional Experience

# NVIDIA Corporation, Santa Clara, California

Senior Research Scientist

October 2008 - Current

As member of the NVIDIA Programming and Systems Research Group:

- Co-developer of Thrust, an open source library for productive, portable, high performance parallel programming
- With my collaborator, conceived, developed, evangelized, and productized a sophisticated C++ library for parallel computing

As member of the NVIDIA Computational Graphics Research Group:

- Development team member of OptiX, a platform for high performance parallel ray tracing
- Designed and implemented the architecture of Design Garage, a GPU-accelerated photorealistic interactive rendering application

As visiting lecturer at Stanford University:

- With my co-lecturer, designed and delivered a graduate-level class on massively parallel programming
- Designed programming assignments and built an online tutorial for GPU programming

#### University of Illinois Urbana-Champaign, Urbana, Illinois

Research Assistant in Computer Graphics

August, 2002 - August, 2008

Developed novel parallel algorithms for photorealistic rendering.

#### **NVIDIA Corporation**, Santa Clara, California

 $Research\ Intern$ 

May 2007 - August 2007

Worked with the NVIDIA Research team:

- Investigated unique applications of massively parallel processors to ray tracing
- Researched techniques for eliminating incoherent behavior unique to graphics applications

# NVIDIA Corporation, Berkeley, California

Film Team Intern

May 2006 - August 2006

Worked with the Gelato Final Frame Renderer team:

- Investigated new GPU-accelerated production quality rendering techniques
- Developed new GPU-accelerated fast render preview features

## NVIDIA Corporation, Santa Clara, California

Graphics Drivers Intern

May 2005 - August 2005

Worked with the DirectX graphics drivers team:

- Developed new driver for next generation hardware
- Diagnosed and eliminated bugs

Skillset

Expert C++, GPU programming, Python, Mercurial, Scons, Stack Overflow, Technical Writing