

Jared Hoberock

CONTACT INFORMATION	jaredhoberock@gmail.com github.com/jaredhoberock
PROFESSIONAL INTERESTS	Parallel programming, systems programming, functional programming, open source, API design
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, <i>Summa Cum Laude</i>
PROFESSIONAL EXPERIENCE	NVIDIA Corporation , Santa Clara, California <i>Senior Research Scientist</i> October 2008 - Current As member of the ISO C++ Standardization Committee: <ul style="list-style-type: none">• Project editor of the Technical Specification for C++ Extensions for Parallelism• Designed and rallied consensus for a standard parallel algorithms library for C++ As member of the NVIDIA Programming and Systems Research Group: <ul style="list-style-type: none">• Developer of Thrust, an open source library for productive, portable, high performance parallel programming• Conceived, developed, evangelized, and productized a sophisticated C++ library for parallel computing As member of the NVIDIA Computational Graphics Research Group: <ul style="list-style-type: none">• 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 University of Illinois Urbana-Champaign , Urbana, Illinois <i>Research Assistant</i> August, 2002 - August, 2008 Developed novel parallel algorithms for rendering global illumination.
	NVIDIA Corporation , Santa Clara, California <i>Research Intern</i> May 2007 - August 2007 Worked with the NVIDIA Research team: <ul style="list-style-type: none">• Investigated unique applications of massively parallel processors to ray tracing• Researched techniques for eliminating incoherent behavior unique to graphics applications
	NVIDIA Corporation , Berkeley, California <i>Film Team Intern</i> May 2006 - August 2006 Worked with the Gelato Final Frame Renderer team: <ul style="list-style-type: none">• Investigated new GPU-assisted production quality rendering techniques• Developed new GPU-based fast render preview features

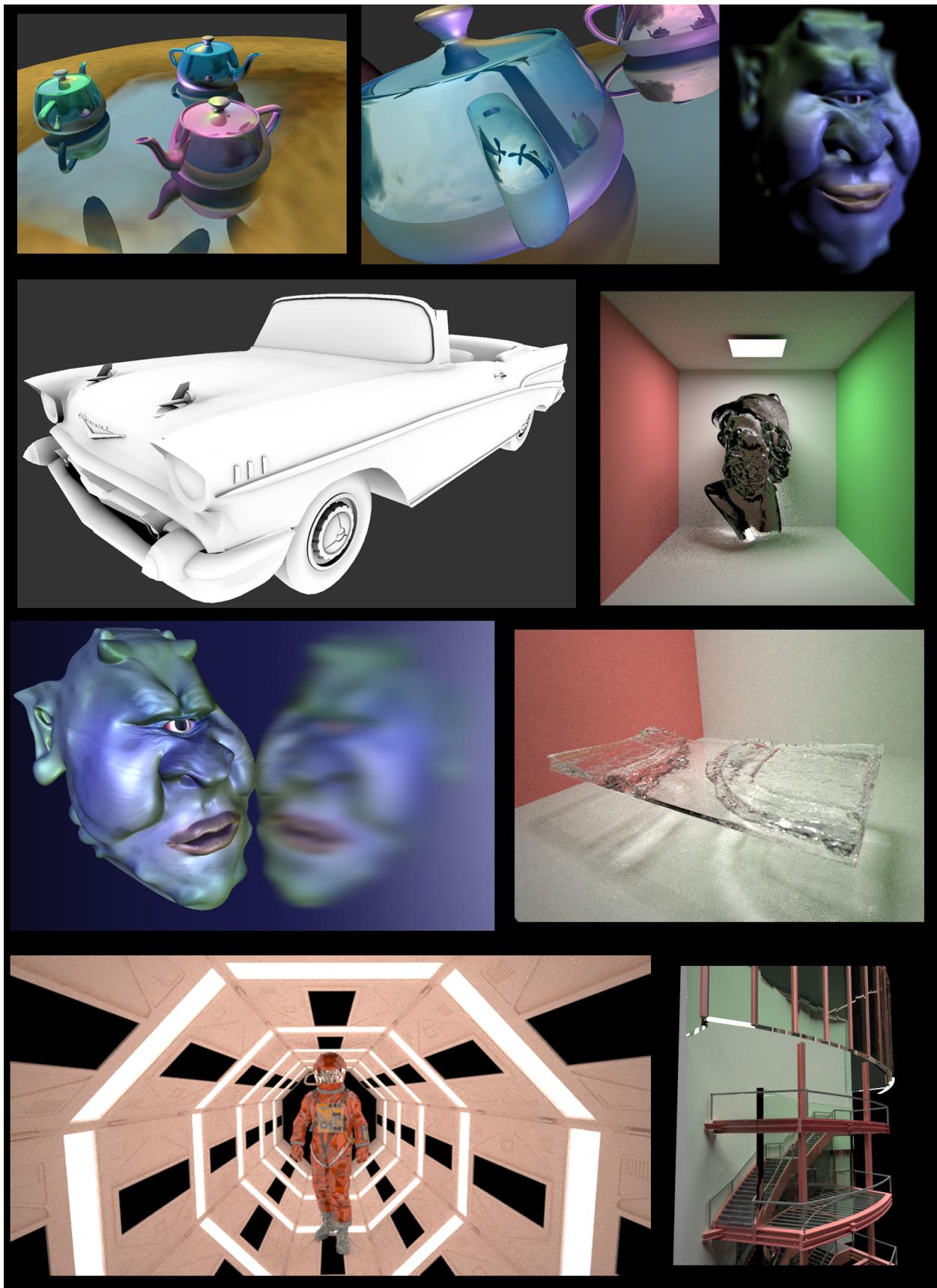


Figure 1: **Selected Images.** **Top:** Interactive GPU ray tracing of dynamic objects. **Upper middle:** Interactive ambient occlusion and unbiased light transport on the GPU. **Lower Middle:** Glossy reflections on the GPU and caustics synthesized with Metropolis light transport. **Bottom:** Noise-aware Metropolis light transport.