



<b>Education</b>	<p><b>Carnegie Mellon University</b>, Pittsburgh, PA Ph. D. in Computer Science Candidate, advised by Kayvon Fatahalian and Jim McCann. August 2020.</p> <p><b>Carnegie Mellon University</b>, Pittsburgh, PA M.S. Computer Science - Research, December 2018</p> <p><b>Carnegie Mellon University</b>, Pittsburgh, PA B.S. Computer Science and Arts (Lighting Design), May 2014, University Honors.</p>
<b>Research Statement</b>	<p>My research is about enabling designers and artists of all skill levels to create more efficiently though the development of experimental interfaces for supporting creative tasks. I believe that design interfaces should support the user at every part of the creative process, instead of ceding control to a black box computer system. I am interested in continuing to build new systems for creativity support, from sampling-based systems for assisting preliminary design, to determining how to improve per-parameter operations.</p>
<b>Thesis</b>	<p>Interactive Methods for Improving Global and Local Exploration in Parameter-Based Computer Graphics Design Tools</p>
<b>Publications</b>	<p><b>Design Adjectives: A Framework for Interactive Model-Guided Exploration of Parameterized Design Spaces</b> Evan Shimizu, Matt Fisher, Sylvain Paris, Jim McCann, Kayvon Fatahalian To appear at UIST 2020</p> <p><b>Finding Layers Using Hover Visualizations</b> Evan Shimizu, Matt Fisher, Sylvain Paris, Kayvon Fatahalian Proceedings of Graphics Interface 2019 Presented at Graphics Interface 2019</p> <p><b>Exploratory Stage Lighting Design using Visual Objectives</b> Evan Shimizu, Sylvain Paris, Matt Fisher, Ersin Yumer, Kayvon Fatahalian Computer Graphics Forum, Vol. 38, No. 2 Presented at Eurographics 2019</p>
<b>Research Projects</b>	<p><b>Lumiverse</b> 2014-Present, Carnegie Mellon University A software framework for creating lighting control applications. Developed in C++ and available to the public at <a href="http://lumiverse.cs.cmu.edu">lumiverse.cs.cmu.edu</a>. Presented at SXSW Interactive 2015. Supported in part by funding from the Carnegie Mellon University Frank-Ratchye Fund for Art @ the Frontier.</p> <p><b>Augmented Reality Interaction with the Pausch Bridge</b>, Carnegie Mellon University With Kayvon Fatahalian, Spring 2013 Allowed users to finger paint lighting on the Pausch Bridge by touching the bridge panels on an iPad screen Designed and implemented the program with advising from Kayvon, supported by SURG Grant Awarded the First Place Alcoa Undergraduate Research Award and the First Place Frank-Ratchye STUDIO for Creative Inquiry Award at the 2013 Meeting of the Minds Undergraduate Research Symposium</p>
<b>Teaching</b>	<p><b>Interaction and Expression using the Pausch Bridge Lighting (15-661)</b> Spring 2015 - Spring 2017, Carnegie Mellon University, Co-Taught with Cindy Limauro. My lighting control framework was available for students to use in their projects for this course.</p>
<b>Work Experience</b>	<p><b>Adobe Research</b>, San Francisco, CA <i>Research Intern</i> (May - August 2018) With Matt Fisher, Sylvain Paris. Performed preliminary work exploring the potential of systems for exploring high-dimensional parameterized design spaces. Completed work on the paper "Finding Layers Using Hover Visualizations."</p> <p><b>Adobe Research</b>, San Francisco, CA <i>Research Intern</i> (May - August 2017) With Matt Fisher, Sylvain Paris, and Ersin Yumer. Developed a constraint-based search system for complex image filters called Photoshop Actions.</p>



## Work Experience

### **Adobe Research**, Boston, MA

*Research Intern - Creative Technologies Lab* (June - August 2016)

With Sylvain Paris. Developed a system to facilitate lighting design exploration by applying image-derived visual objectives to the stage.

### **Microsoft Research**, Redmond, WA

*Intern- Natural Interaction Research* (June - September 2015)

Supervised by Andy Wilson. Developed prototype projector system that produced motion using 35mm slides.

### **Carnegie Mellon University**, Pittsburgh, PA

Teaching Assistant for 15-462/662 Computer Graphics (Spring 2014), 15-466/666 Computer Game Programming (Fall 2013), 15-150 Principles of Functional Programming (Fall 2011)

### **Electronic Theatre Controls**, Middleton, WI

*Student Help in R&D* (June - August 2013)

Developed networking applications for current lighting systems, developed validator for checking DDL files against current standard, updated internal libraries to comply with industry standards

### **Autodesk**, Waltham, MA

*Software Architecture Intern - Revit* (June-August 2012)

Developed cross-platform cloud collaboration library for Windows, Mac, and iOS

### **Blue Frog Gaming**, Akron, OH

*Software Engineering Intern* (May-August 2011)

Developed features for the Facebook games Stardrift Empires and Starfleet Commander with Ruby on Rails

## Theater

### **Carnegie Mellon School of Drama**

*L'etoile*, Lighting Designer, Dir. Greg Lehane, January 2014

*Albert Herring*, Master Electrician, LD: Andrew Schmedake, October 2013

*Mercury Soul*, Media Designer, Dir. Mason Bates, April 2013

*Mud*, Lighting Designer, Dir. Asia Gagnon, April 2013

*Changing Times*, Lighting Designer, Chor. John Garet Stoker, Dance Light January 2013

*A Curious Case of Cruelty*, Lighting Designer, Chor. Harron Atkins, Dance Light January 2013

*Dancing Bridge*, Lighting Designer, displayed on the Pausch Bridge, December 2012

*Macbett*, Assistant Media Designer, MD: Dan Efros, December 2012

*Working*, Lighting Designer, Dir. Ingrid Sonnichsen, September 2012

*Les Enfants Terribles*, Assistant Master Electrician, ME: Jon Mark, May 2012

*L'enfant et les Sortilèges*, Assistant Master Electrician, ME: Robert Kubisen, January 2012

### **Scotch 'n' Soda Theater, Carnegie Mellon University**

*Urinetown*, Sound Tech Head, November 2011

*Cabaret*, Assistant Sound Designer, April 2011

*Boeing Boeing*, Lighting Designer, February 2010

*What We Bury*, Lighting Designer, Dir. Olivia O'Connor, December 2010

*The Rocky Horror Show*, Sound Design and Board Op., Dir. Nicholas Petrillo, October 2010

## Video

**CMU Buggy Races**, Camera Director and Live Editor, April 2014

## Open-Source Projects

### **Stats of the Storm**

Creator and Maintainer (February 2018 - present), Language/Framework: JS/Electron  
Replay analysis application for Blizzard's Heroes of the Storm.

GitHub: <https://github.com/ebshimizu/stats-of-the-storm>

### **Soothsayer**

Creator and Maintainer (November 2018 - present), Language/Framework: JS/Electron  
Real-time overlay and graphics generation for livestreaming Heroes of the Storm

GitHub: <https://github.com/ebshimizu/soothsayer>



## Open-Source Projects

### XIV Analysis

Contributor (November 2019 - present). Language/Framework: JS/TS/React  
Automated performance analysis and suggestion platform for Final Fantasy XIV: Shadowbringers  
GitHub: <https://github.com/xivanalysis/xivanalysis>

## Games

**ARFpg**, Programmer (Spring 2016). A game about petting dogs, received GCS Gold Award  
**The Last Dragon**, Project Lead, Programmer, Designer (Spring 2014). 2D shooter, received GCS Gold Award  
**Pipes**, Project Lead, Programmer, Designer (Fall 2012). 2D tile-rotating puzzle game, received GCS Gold Award  
**Ice Cream Dragon**, Programmer, Designer (Spring 2012). 2D "Grand Theft Ice Cream," received GCS Gold Award  
**Merblade**, Designer (Spring 2012). Side-scrolling mermaid shooter, received GCS Gold Award  
**Beatbeater**, Lighting and Shader Programmer (Fall 2012). Unity platformer about punching sheep  
**Alyesium Chronicles**, Project Lead, Programmer, Designer (Fall 2011). Fantasy vs. sci-fi turn-based strategy game  
**Parchment Dragon**, Project Lead, Designer, Programmer (Fall 2010). Vertically scrolling fantasy shooter

## Activities

### Game Creation Society, Carnegie Mellon University

President (2013), Director of Development (2012)

Oversaw all club activities, advised game projects, ran general meetings, coordinated with external groups

### cmuTV, Carnegie Mellon University

Creative Director (2011-2014)

Directed video shoots, edited videos and managed original content that the organization produced  
Directed the 2012 CMU Buggy races and produced promotional videos for the event

## Honors

ESA Computer and Video Game Scholarship Recipient (2010)

Recipient of the Hannah Nguyen/Evan Shimizu "Consistency and All Around Excellence in Theatre"

Scholarship from the Edina High School Thespians (2010)

George Eastman Young Leaders Award, University of Rochester, Rochester NY (2009)