

## EDUCATION

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- Princeton University | NJ** **2015 – 2019**
- Computer Science, Bachelor of Science in Engineering; Certificate in Visual Arts / Graphic Design
  - Selected coursework: Computer Graphics, Advanced Computer Graphics, Typography, Gestalt, Interface Design
- Community School of Naples | FL** **2011 – 2015**
- Valedictorian, Activities: President of Math Club and Art Club, Varsity Basketball, Programming Team
- Schrenk Photography Institute | FL** **2010 – 2015**
- College-level intensive photography program taught by University of Miami faculty

## WORK EXPERIENCE

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- DreamWorks Animation, Feature Film | Lighting Technical Director** **Fall 2019 – present**
- Debugging issues with pipeline and lighting/compositing software for Crood 2 lighting artists | Houdini, Nuke
  - Programming tools to streamline department workflows | Python
- SIGGRAPH | Student Volunteer** **Summer 2019**
- Microsoft, Windows Core | Technical PM Intern** **Summer 2018**
- Spearheaded effort creating compelling visual integration of 3D models in Windows compositor
  - Researched and helped implement 3D lighting scenarios for public-facing Windows.UI.Composition API
  - Developed applications to demo 3D lighting scenarios and evangelize API contributions | C#, XAML
- Dexter Sinister / O-R-G | Graphic Designer** **2018 – 2019**
- Designed printed layouts / developed graphic work for 3D mock-ups at small NYC studio | Processing, Python
- Outdoor Action | Outdoor Educator** **2016 – 2019**
- Led ten, week-long canoe and backpacking trips focused on soft skills and experiential leadership development
  - Collaboratively developed curriculum and taught courses in Leave No Trace ethics and Wilderness First Aid
- Microsoft, AI and Research | Software Engineering Intern** **Summer 2017**
- Developed extension for Jupyter Notebook open source community | Python, JavaScript
  - Created design and spec for tool onboarding access to deep learning GPU cluster

## SKILLS

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Graphics Software | **Houdini, Nuke, Photoshop, Illustrator, InDesign, Lightroom, Processing, Rhino, Glyphs**  
Languages | **Python, Java, C++, GLSL**

## INDEPENDENT PROJECTS

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**Topography Typography** | letterform detection and typeface creation from arbitrary satellite imagery | Python, TensorFlow  
**Photon Mapping** | implemented global illumination algorithm including caustics and a participating medium | C++  
**Fur Rendering** | implemented fur shader for arbitrary surfaces in real-time with shaders and fins algorithm | Three.js, GLSL  
**Snowflakes** | programmatically-generated snowflakes accompanying logic for patterns by NYC-based artist | Processing

## RECENT EXHIBITIONS

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**Light Shards** | site-specific series of murals serving as documentation of ephemeral sunlight patterns | Princeton University | 2019  
**CAUSTICS** | solo thesis exhibition engaging with data collection & embodied language | Hurley Gallery | 2019  
**Public Lands, Private Hands** | topographic installation accompanying event elevating native voices | Lewis Arts Complex | 2019

## HONORS AND AWARDS

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**Lucas Award in Visual Arts** | Princeton University | 2019  
**Creative Leadership Award for Facilitation** | Princeton Office of the Dean of Undergraduate Students | 2019  
**Book Award for Studies in Media Theory** | Princeton German Department | 2019  
**Best Poster for Independent Work Research** | Princeton Computer Science Department | 2018  
**Berl & Berl Senior Thesis Research Award** | Princeton Lewis Center for the Arts | 2018  
**Gold Key for Visual Artwork** | Scholastic Arts & Writing Awards | 2015  
**Jane N. Reidel College Scholarship** | The von Liebig Art Center | 2014  
**Juried Grand Prize Winner** | Visual Voices International Photography Exhibit | 2013