Experience

**Languages & Frameworks**

C++ | WebGL | JavaScript | etc

Open Frameworks | Processing

Three.js

**Algorithm Design**

Geometry | Graph Theory Rendering

Computer Algebra

Compilers

Languages

**Game Design**

Board Games

Digital Games

**User Experience Design**

User Testing

Comparative Analysis

Mindmap

Sketching

Axure

**Professional Tools**

Git

Linux

Trello

**Fine Arts**

Photography

Bassoon | Singing

Composition

Drawing

**Bryce Summers Consulting, Brooklyn, NY**

*Principle | Summer 2016 – Present*

- Designing a compiler for the Escher Animation programming language.

- Domino Traveling Salesman Problem for guiding a laser beam.

- Merging halfedge faces for scribble segmentation digital game.

**Autodesk, San Francisco, CA**

*Tinkercad Developer Intern | Summer 2016*

- Screen Space Constructive Solid Geometry Algorithm, saving up to $30,000 each month.

**Studio for Creative Inquiry, Carnegie Mellon University (CMU), Pittsburgh, PA**

*Research Assistant | Summer 2014 – May 2016*

- Planar scribble to halfedge mesh algorithm.

- Boundary Subdivision Scheme called ofxButterfly for Augment Hand Series art project.

- Reduction from ofxPuppet to LAPACK linear algebra solver.

**Introduction to Computer Graphics Course (15-462), CMU, Pittsburgh, PA**

*Teaching Assistant | Summer 2014 – May 2016*

- Developed 2 / 5 assignments with Keenan Crane on Geometry and Animation.

- Held weekly office hours, 2 review sessions, and private meetings with students.

- Contributed two final project options on Iterated Function Systems and 2D ray tracing.

**Undergraduate Research Office, Carnegie Mellon University, Pittsburgh, PA**

*Summer Undergraduate Research Fellowship | Summer 2013*

- Invented the Summers **C**omputer **A**ided **M**athematic **P**rogram (CAMP). Iterative Design,

user testing, literature review, custom made visual rendering, data structures, and algorithms.

Education

**MS Integrated Digital Media,** New York University (Graduating in Spring 2018)

**BS (with honors) Computer Science,** Carnegie Mellon University (3.69 gpa, May 2016)