

# Bryce Summers

$$\mathcal{O}(n^2) \rightarrow \mathcal{O}(n \log n) \rightarrow$$



**Idiosyncratic Designer** | brycesummers.com | bs3363@nyu.edu | Brooklyn, NY

## 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

## Experience

### 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 Computer Aided Mathematic Program (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)