

## Education

**Carnegie Mellon University**  
May 2018 Pittsburgh, PA

*Coursework*  
*\* currently enrolled*

B.A. Architecture  
Computer Science Minor

Dean's List: Fall '16, Spring '17, Fall '17  
School of Architecture Honors: Fall '16, Spring '17, Fall '17

*Practical Data Science\*, Computational Perception\*, Computer Systems\*, Functional Programming*  
*Parallel Algorithms / Data Structures, Parametric Modeling, Imperative Programming, Probability Theory*

**Carnegie Mellon University**  
Dec. 2019 Pittsburgh, PA

M.S. Computational Design  
[Expected]

## Work Experience

**School of Architecture**  
**Communication Platform**  
2017 - 2018 Pittsburgh, PA

Director

*Inaugural director for an intra-school communication platform. Recruited and manage 12 student staff.*  
*Oversee all aspects of professional development events with notable alumni, from planning to execution.*

**Carnegie Mellon University**  
2015 - 2017 Pittsburgh, PA

Teaching Assistant

Case Studies in Urbanism

Fall 2017

*Helped lead class discussions, critiqued student work, graded assignments, admin support*

Pinball Design Lab - Summer Academy of Math and Science

Summer 2016

*Aided students in design, fabrication, circuitry, and programming of two small pinball machines*

Architecture Pre-College

Summer 2015

*Taught students architectural software and analog media, critiqued design work*

**ShubinDonaldson**  
Summer 2017 Santa Barbara, CA

Architectural Intern

*\$50M+ home in design development phase - designed, produced drawings, renderings, and models.*  
*Exterior remodel in schematic design phase - lead design, met with clients, produced all documents*

**Friedman Research Corp.**  
2010 - 2018 Austin, TX

Research Associate

*Performed R+D duties, produced research documents, research proposal materials.*  
*Topics include building fire and wildfire simulation, composite materials, GIS workflows*

**Lamborghini Automobili**  
Advanced Composite Structures Laboratory  
Summer 2014 Seattle, WA

Research Intern

*Conducted destructive carbon fiber material properties research. Manufactured samples with various*  
*processes of fabrication and geometric configurations, tested four different structural performance criteria.*

## Projects

**Automatic Lineweighting**  
Fall 2017 Independent

*Automates the architectural perspective lineweighting process.*  
*Takes 3d Rhino object as input, generates linework with five lineweight categories.*  
*Existing methods generate a maximum of three lineweights.*

**Image Subject Extraction**  
Fall 2017 Independent

*Identifies subjects of images, extracts subjects, and exports to PNG format.*  
*Utilizes the Mask R-CNN algorithm developed by Facebook AI*

## Skills

### Languages

Python SML  
C / C++ JavaScript  
Matlab HTML / CSS

### Frameworks

Arduino Pandas  
Processing Keras  
NumPy TensorFlow

### Software

Adobe Creative Suite Rhinoceros3D  
AutoCad SolidWorks  
Grasshopper3D Revit