

IANF@CMU.EDU

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(512) 809-3684

Summer 2015

Education

Carnegie Mellon University

May 2018 Pittsburgh, PA

Coursework

B.A. Architecture

Dean's List: Fall '16, Spring '17, Fall '17

Computer Science Minor

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

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

Independent

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

Image Subject Extraction

Fall 2017

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.

Identifies subjects of images, extracts subjects, and exports to PNG format.

Utilizes the Mask R-CNN algorithm developed by Facebook AI

Languages

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

Skills Frameworks

Arduino Pandas Processing Keras NumPy TensorFlow

Software

Adobe Creative SuiteRhinoceros3DAutoCadSolidWorksGrasshopper3DRevit