

## OBJECTIVE

To acquire experience in the field of computer science and graphics.

## EDUCATION

**HIGH TECHNOLOGY HIGH SCHOOL** | September 2013 – June 2017

**UNIVERSITY OF PENNSYLVANIA** | August 2017 – May 2021

**School of Engineering and Applied Science Candidate for BSE**, Digital Media Design  
**Candidate for MSE**, Computer Graphics and Game Technology

## EXPERIENCE

**CIT 593 / CIS 240 TEACHING ASSISTANT** | August 2019 – present

Intro to Computing Systems is an introductory computer architecture class covering content from transistors and binary to basic operating systems, compilers, assembly language, and C.

- hold office hours and grade homeworks
- lead recitation once a week (CIT 593)

**VINCI VR PART-TIME 3D MODELER** | May 2019 – August 2019

VINCI VR is a company producing Virtual Reality solutions for clients

- worked on a 3D modeling project for the US Air Force

**DONOVAN DMD SUMMER INTERN** | June 2019 – July 2019

This is a research grant provided to two Digital Media Design students every year. I worked in the SIG lab (computer graphics lab) on a crowd simulation project

- worked on environments in Unreal Game Engine (landscapes) and buildings (Maya)
- created crowd simulations in Houdini

**PENNAPPS CO-HEAD OF CREATIVE** | April 2018 – present

PennApps is the nation's oldest and largest hackathon, with thousands of attendees from around the world. I work as one of two directors in charge of creating material for the event. I started as a committee member in 2018 and became co-head in 2019.

- create themed flyers, swag, and more for attendees and sponsors
- manage social media, take photos
- co-head for PennApps XX branding and website: <https://2019f.pennapps.com/>

**PRECISE CENTER WEB AND GRAPHIC DESIGNER** | December 2018– January 2020

I worked on a website for the F1Tenth competition, an autonomous racing event, and the website for the 2019 PRECISE Industry Day at Penn

- designed overall look and colors of both sites, rebranded F1Tenth
- used HTML and CSS to build the sites
- <http://ftenth.org> and <https://precise-industry-day.seas.upenn.edu/2019/>

**HILL COLLEGE HOUSE STUDENT MARKETING MANAGER** | October 2017– May 2019

Hill College House is one of 5 of the first-year dormitories at Penn. I work closely with the House Coordinator and House Dean to

- design professional marketing and promotional materials for house events
- send out weekly newsletter and social media updates

## SKILLS

**PROGRAMMING:**

C++, C, C#, Python, Java,  
HTML, CSS, JavaScript

**SOFTWARE:**

Maya, Unreal Engine, Unity Game Engine, Houdini, ZBrush,  
Mudbox, Arnold, MotionBuilder, Adobe Suite

**RELEVANT KNOWLEDGE:**

Programming: *Computer Animation, Computer Graphics, Game Design, Advanced Rendering, Data Structures, Algorithms, Computer Architecture, Software Design and Development*  
 Art: *3D Modeling, Simulation, Graphic Design, Digital Illustration, Traditional Art*

## PROJECTS

**MINI MINECRAFT** ▪ C++ (OpenGL, GLSL, Qt) – underwater themed Minecraft

- built first person physics-based game engine with walking, flying, and swimming
- implemented GUI and item bar
- responsible for sound and post-process shading effects

**MINI MAYA** ▪ C++ (OpenGL, GLSL, Qt)

- half-edge data structure and importing obj files
- implemented triangulation, subdivision, skinning

**ICE GEMS** ▪ Unreal (Blueprint)

- Inertia-based ice skating game
- Collect gems as fuel for movement