SUSAN XIE

PROJECTS: **https://suxie.github.io**
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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
Upcoming Coursework: *Physically-Based Rendering, Video Game Design, Software Design*

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 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– present
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://f1tenth.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, Python, Java, HTML, CSS, JavaScript

SOFTWARE:
Maya, Houdini, ZBrush, Mudbox, Arnold, MotionBuilder, Unreal Engine, Adobe Suite

RELEVANT KNOWLEDGE:
Programming: *Computer Animation, Computer Graphics, Data Structures, Algorithms, Computer Architecture, Multivariable Calculus, Differential Equations, Linear Algebra*
Art: *3D Modeling, Simulation, Graphic Design, Digital Illustration, Traditional Art*

PROJECTS

MINI MINECRAFT ▪ C++ (OpenGL, GLSL) — 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)
- half-edge data structure and importing obj files
- implemented triangulation, subdivision, skinning

RASTERIZER ▪ C++
- implemented polar camera model
- import and display obj files