SUSAN XIE

PROJECTS: https://suxie.github.io Email: susanxie@seas.upenn.edu Phone: (732) 890 8823

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 basic operating system, 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 – 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: SOFTWARE:

C++, C, C#, Python, Java, Maya, Houdini, ZBrush, Mudbox, Arnold, MotionBuilder, HTML, CSS, JavaScript Unreal Engine, Unity Game 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