

EDUCATION

University of Pennsylvania Philadelphia, PA Fall '21
 BSE in Computer Science: Digital Media Design
 Minor in Mathematics

SKILLS

C++ • OpenGL • Java • C • Kotlin • Ruby • OCaml
 Maya • ZBrush • Mudbox • Illustrator • Photoshop • InDesign • Premiere • After Effects • Processing
 Vietnamese (native) • English (proficient) • Japanese (beginner)

PROJECTS

Path Tracer *C++* Fall '18
 Implemented Monte Carlo path tracer with full lighting, multiple importance sampling, global illumination and photon mapping Fall '18

Ray Tracer *C++*
 Made a recursive ray tracer for lambert, blinn-phong, specular reflection and transmission

Mini Minecraft *C++, OpenGL* - with two teammates Fall '18
 Programmed player's physics and collision detection with ray casting
 Texture mapped with OpenGL
 Implemented biomes with Worley noise

Mini Maya *C++, OpenGL*
 Created a small version of Autodesk Maya which has half edge structure
 Implemented skeleton skinning, extrude and subdivide Fall '18
 Built a GUI for users to modify vertex, edge and face attributes of an input mesh

Shader & Vertex *C++, OpenGL*
 Implemented lambert, blinn-phong, lit sphere, iridescent Fall '18
 Created vertex deformation shader for the input model through noise functions
 Built post-processing shaders (greyscale and vignette, gaussian blur, sobel, bloom, Worley noise)

Rasterizer and virtual camera *C++* Fall '18
 Programmed a rasterizer for 2D & 3D models and a virtual camera

Scene graph *C++, Qt* Spring '18
 Created a scene graph and a GUI to transform each part of the scene graph

Mini-Wikipedia *Java* Fall '17
 Built an engine for users to find pages most related to their input with graph algorithms

EXPERIENCE

University of Pennsylvania, Teaching Assistant Fall '18
 FNAR 264 Computer science workshop in Processing
 Lead workshops to teach students how to program in Processing to create images for

ACTIVITIES

UPGRADE, member Spring '19
 Helped a team to build a 3D game
 Modeled in ZBrush

SIGGRAPH, mentor Fall '18 - Present

Alpha Omega Epsilon Sorority, member Spring '19

Women in Computer Science, mentor Fall '17 - Present

HIGHLIGHTED COURSEWORK

CIS 461 Advanced Rendering

CIS 460 Introduction to Computer Graphics

CIS 350 Software Design

CIS 121 Data structures and Algorithm

CIS 262 Automata, Computability, and Complexity

FNAR 235 3D Computer Modeling in Maya