THY TRAN

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EDUCATION

University of Pennsylvania, School of Engineering Philadelphia, PA
BSE in Computer Science: Digital Media Design — May 2021

SKILLS

C++ • C# • Java • GLSL • HLSL • WebGL • CG • MaxScript • C • JavaScript • Kotlin • OCaml
Qt • Visual Studio • Unity • Unreal Engine • Android Studio • Houdini
Maya • ZBrush • Substance Painter • 3ds Max • Adobe Creative Suite

COURSES

Computer science

- Advanced Rendering
- Computer Animation
- Game Design and Development
- Software Design and Engineering
- Physically Based Animation
- Data Structures and Algorithms

Art

- Figure Modeling in ZBrush
- Advanced Modeling in Maya

EXPERIENCE

Electronic Arts: BioWare, Technical Artist Intern, C#, 3ds Max, MaxScript, Houdini — May - Aug 2020
Implemented a procedure to enhance meshes with vertex colors and replace them in a game
Improved tools used to generate vertex color for tree meshes
Communicated with artists to assess needs and provide support

University of Pennsylvania, Research Assistant, ITK Snap, Houdini, team of 3 — Jun - Aug 2020
Built a pipeline to model organs of patients with hiatal hernia from CT scans
Segmented organs on CT scans and created a 3D simulation of the organs

University of Pennsylvania, Teaching Assistant
Data Structures and Algorithms, Java, IntelliJ, Eclipse — Jan - May 2020
Advanced Rendering, C++, Qt, WebGL — Jan - May 2020
Visualizing the Past, Maya — Aug - Dec 2019
Art, Design and Digital Culture (Head TA), Java, Processing — Jan 2019 - May 2020

PROJECTS

Haystack Hoarder Unity, C#, Photon Unity Networking, Maya, team of 3 — May 2020
Developed a 3D online multiplayer competitive game
Programmed player movement and interaction, behavior of resources, UI elements and sound effects
Modeled, textured, rigged and animated assets in the game

Big Fish, Little Fish Unreal Engine, Maya, team of 3 — Apr 2020
Designed player mechanics, AI for predator and prey, UI and sound effects for a 3D puzzle game
Created underwater environment with post processing effects and particle system
Modeled, textured, rigged and animated assets in the game

Jello Simulations C++, Houdini — Dec 2019
Implemented MBM on APIC grid system
Programmed mass-spring system

Path Tracer C++, Qt — May 2019
Designed Monte Carlo path tracer with multiple importance sampling, global illumination and photon mapping
Built features such as point & spotlight, implicit surfaces, thin lens camera and constructive solid geometry

Habit Tracker Java, JavaScript, MongoDB, Android Studio, team of 4 — May 2019
Developed an Android application with data visualization that let users enter daily entry for their habits, access a list of resources for mental health and answer surveys
Coded a website that allows admin to change user data and create a new survey for users

Mini Minecraft C++, OpenGL, Qt — Dec 2018

- Wrote player's physics and collision detection with ray casting, texture mapped with OpenGL
- Made biomes with Worley noise

ACTIVITIES

- UPGRADE Game modeler
- SIGGRAPH Webmaster|Mentor
- Orientation Peer Advisor