AKSEL TAYLAN

737-529-5021 akseltaylan@gmail.com akseltaylan.me vimeo.com/aksel github.com/akseltaylan

EDUCATION

B.S., Computer Science
Minor in Mathematics
Texas A&M University
3.7/4.0 GPA (Major)
Expected May 2020

Coursework: Computer Graphics, Data Structures & Algorithms, Physically Based Modeling & Animation, Linear Algebra, Computer Systems, Differential Geometry of Curves & Surfaces

SKILLS

Languages: C++, Python, C#, VEX, Java, GLSL

Software: Houdini, Unity, RenderMan, Maya, Photoshop, Git

OS: Linux, Windows

Areas: Software Development, Graphics Programming, Pipeline Tools Engineering, Game Development

Interests: Computer Animation, writing, music, tennis, basketball, data analysis, Turkish food, Nintendo games

ACCOLADES

Industrial Affiliates Program Computer Science Scholarship Recipient 2018-20

Recognized as a Distinguished Student & UG Research Scholar by Texas A&M College of Engineering

Member of the Engineering Honors Program & ACE Scholar - Computer Science Honors Program

Vice President of TAMU ACM SIGGRAPH Chapter (Fall 2019), Industry Relations Officer (Spring 2019)

Part of team that won "Most Creative Project" at Blue Sky's 2019 Internal Hackathon

EXPERIENCE

Blue Sky Studios *Technical Director Intern, Production Technology*
GREENWICH, CT | SUMMER 2019

Developed software and tools for the feature film *Nimona.* In a team of two, wrote a tube polygon reduction library for Maya in Python to optimize layout rig file sizes. Leveraged PDG in Houdini to make an HDA that allows artists to render frame sequences locally on their machine. Wrote a C++ RenderMan plugin to achieve art-directable, stylized rim lighting in order to cut down manual rotoscoping required by lighting artists.

Texas A&M Computer Science Dept *Undergraduate Research Assistant*
COLLEGE STATION, TX | MAY 2019 - PRESENT

Working with Dr. Nima Kalantari on developing an algorithm that uses convolutional neural networks (CNNs) to denoise Monte Carlo rendered stereoscopic images for VR applications.

Texas A&M Visualization Lab *Pipeline Developer*
COLLEGE STATION, TX | AUGUST 2018 – PRESENT

Maintain and implement functionality to the computer animation pipeline of the Visualization department. Providing tech support for over 400 students and faculty. Occasionally, write Maya and Houdini tools to assist students with film/game projects.

Learning Interactive Viz. Experience Lab *Software Engineer Intern*
COLLEGE STATION, TX | NOV. 2017 – AUGUST 2018

Employed graph-based node tool to make it easy for game designers to design and modify the token world for shipped title *ARTe: Hemut*. Wrote file hierarchy system for a mini-game UI framework to make it scalable and simple for developers to add new mini-games in the future.

PROJECTS

Monte Carlo Path Tracer *C++, OpenGL*

Path tracer supporting global illumination. Includes reflection, refraction, anti-aliasing, soft shadows, triangulated meshes, texture mapping, acceleration structures, Monte Carlo integration, Russian Roulette termination.

AI Crowd Simulation *C#, Unity*

Utilized behavior tree data structure to control thousands of 3D human agents to act as a real-life crowd. Includes agent-to-agent interaction and collision detection.