

EDUCATION

Master of Science (M.S) August 2017
VISUALIZATION (expected)
Texas A&M University

Bachelor of Engineering (B.E) 2009
COMPUTER SCIENCE & ENGINEERING
PES Institute of Technology

SKILLS

Software

Houdini | Maya | MARI | Photoshop | Shotgun | Arnold
| Unreal | Unity

Languages

C++ | OpenGL | Python | VEX | Processing | HTML |
CSS | JavaScript

OS

Windows | Linux | Mac

PROFESSIONAL EXPERIENCE

FX Intern June - August 2016
FRAMESTORE | New York, NY

- Created FX elements using Houdini for a commercial as well as an in-house animated short
- Built a procedural modeling tool to create static snow and icicles for set dressing
- Added functionality to existing pipeline tools and digital assets using VEX

FX Lead May - August 2015
TEXAS A&M UNIVERSITY
Summer Industry Course with Walt Disney Animation Studios

- Created a 30 second animated short under the guidance of artists from Walt Disney Animation Studios
- Responsible for creating FX elements in Houdini
- Assisted in modeling and texturing of few props using Houdini and Maya

Web Development Intern April - May 2014
QUADWAVE CONSULTING

- Developed responsive websites for desktop, tablet and mobile use
- Redesigned UI for various existing company projects
- Generated marketing content for use in company projects and activities

Graphics Programmer Intern February - April 2013
VIRTUAL LOGIC SYSTEMS

- Developed tools for a real time welding simulator
- Created props and relevant effects

ADDITIONAL EXPERIENCE

Graduate Assistant - Teaching Sept. 2016 - Present
TEXAS A&M UNIVERSITY

- Responsible for grading assignments and projects for VIST 270 (Computing for Visualization 1)
- Responsible for helping students solve programming issues and conducting information sessions

Graduate Assistant - Research January - May 2016
TEXAS A&M UNIVERSITY

- Assisted on a NSF funded Augmented Reality project based on eye tracking
- Created scripts in Matlab for testing in Unity

Graduate Assistant - Teaching Jan - December 2015
TEXAS A&M UNIVERSITY

- Responsible for grading essays for VIST 375 (Foundations of Visualization)

THESIS

Art directable phase change of fluids

Research and Development of a plugin for Houdini that allows artists to control fluid behavior such as melting (ice, chocolate, etc.) and hardening (ice, lava, etc.)

RELEVANT COURSEWORK

Physically Based Modeling | Digital Image Processing | Image Synthesis | Rendering and Shading | Interactive Virtual Environments | Computer Graphics | Data Structures | Analysis of Algorithms | Object Oriented Programming using C++ | Software Engineering

PROJECTS

Flocking Simulation using Processing

- Developed a flocking simulation based on Craig Reynolds 1987 SIGGRAPH paper *Flocks, Herds, and Schools: A Distributed Behavioral Model*
- Implemented multiple flocks in one simulation

Lava Simulation using Houdini

- Based on custom temperature and variable viscosity
- Shader development for Mantra renderer

Ray Tracer using C++

- Implemented light sources (point, directional, spot) along with shading models (Lambert, Gooch)
- Other features include refractions, reflections, environment maps, normal maps, depth of field, etc.

Tunnel Tracks HDA using Houdini

- Created a HDA for Unreal Engine that generates a set of tunnels and tracks based on a curve