ANANTHA NATARAJAN

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EDUCATION

Texas A&M University, College Station, Texas

Master of Science, Visualization - Computer Graphics

GPA: 3.65 / 4.0 December 2020

<u>Related Coursework</u>: 3D Modelling & Animation, Digital Image Processing, Physically-Based Modeling & Animation, Design Communication, Life Drawing, Time-Based Media

Anna University, Chennai, India

Bachelor of Technology in Information Technology

GPA: 3.0 / 4.0 April 2016

<u>Related Coursework</u>: Data Structures and Algorithms, Object Oriented Programming, Object Oriented Analysis and Design, Operating Systems, Database Management Systems

SKILLS

Design Tools: Unreal, Maya, Houdini, Unity, Adobe Creative Suite

Technical Skills: C, C++, Python, OpenGL, GLSL, PHP, HTML, CSS, JS, jQuery, WebGL, ASP.NET, MySQL

ACADEMIC PROJECTS

Harvest – Game Developer and Technical Artist [Unreal Engine]

June 2019 - July 2019

- Created a first-person open world farm exploration game guided by mentors from Epic Games, Amazon Games and the game was released in itch.io (https://averagejo.itch.io/harvest)
- Developed a **physics-based character-foliage interaction system** that supports instancing different foliage models and ability to handle around 200K foliage.
- Implemented core gameplay mechanics, AI enemy spawning, in-game UI, game save and re-spawn system using Unreal Engine and rigged foliage models in Maya

Physics Based Simulations[OpenGL, C++]

Aug 2019 - Present

- Architected a particle generator that generates tens of thousands of particles each deriving its attribute from a random distribution with an option to export the simulation as an .obj file.
- Used Stack data structure to efficiently store/discard particles thereby reusing memory locations of dead particles.
- Wrote a custom Python Surface Operator (SOP) in Houdini that reads the simulation from the obj file and visualize the simulation using Mantra Renderer

Art Directable Procedural Placement Tool [Houdini]

Aug 2019 - Present

- Developing a system that help artists create a grayboxed/detailed 3D environment from a simple 2D layout sketch
- Artist will have complete control over the randomized asset placement and distribution. Several layers of different environmental areas encompassing different assets can be layered over one another.

EXPERIENCE

Report Bee Pvt Ltd, Chennai, TN— Visual Designer

May 2017 - June 2018

- Created vector graphics & illustration, User Interfaces and Interactions for web applications.
- Designed several seasonal interactive animations that appeared on Report Bee's landing page.

Jaze Networks Pvt Ltd, Chennai, TN— Full Stack Developer

May 2016 - May 2017

- Completely revamped the franchise module of a Network Management SaaS solution.
- Worked with payment and SMS gateway providers to integrate their solutions with the product.