

MADHU RATNAKAR

TECHNICAL ARTIST

CONTACT

College Station, TX
703-986-9798
tomadhurya@gmail.com
www.madhuratnakar.com

OBJECTIVE

Seeking a Technical Artist position where I can leverage my creative skills and proficiency in technical tools to contribute to the development of visually stunning and technically robust projects. Eager to collaborate with multidisciplinary teams to push the boundaries of visual storytelling.

SKILLS

TECHNICAL ART

VFX, Video Game Design and Mechanics, Tool Development, Rigging, 2D/3D Animation, 3D Modeling and Physics-based Simulation, Niagara, Unreal Blueprints, Virtual Reality

SOFTWARE

Houdini, Unreal Engine, Maya, Unity, Blender, Github, Adobe Creative Cloud, Visual Studio, Autodesk Inventor

PROGRAMMING

C++, C, Python, Linux, VEX, MATLAB, Javascript, React.js, Processing.js, HTML/CSS, Verilog, Esri

EDUCATION

MS VISUALIZATION – TEXAS A&M UNIVERSITY 2022 - 2024

Focus on Technical Art, VFX, Game Mechanics, Game Engine Development, and Tool Development using 3D software specializing in Houdini and Unreal

BS COMPUTER ENGINEERING – VIRGINIA TECH 2017 - 2021

With a minor in Mathematics, coursework includes Machine Learning, Video Game Design, Computer Vision, Digital Image Processing, Embedded Systems, Computer Organization, Microcontroller, Cryptography, and Computer and Net Security

PROJECTS

ATOMIC BOMB RECREATION – VFX DIRECTED STUDY

Recreated two scenes of the famous Atomic Bomb test along with three other VFX artists under the mentorship of a professional VFX animator from DreamWorks

ANIMATED SHORT “FAREWELL” - SUMMER INDUSTRY COURSE

Lead VFX Artist, Rigger, and Microdresser. Also helped with procedural modeling and texturing. Mentored by industry professionals from DreamWorks and Meta

48-HOUR GAME JAM - CHILLENEUM 2023 AND 2024

Lead Programmer and Game Mechanic for my team. Created games “With Hearts Aglow” and “Save My Eggs” using Unreal Engine. Also helped with UI and animations

CLIMATE CHANGE AWARENESS – VIRTUAL REALITY CLASS

Developed VR application in Unity for a group project and conducted a study to help raise climate change awareness in a college university.

EXPERIENCE

GRADUATE TEACHING ASSISTANT – TEXAS A&M 2022 - 2024

Teaching weekly labs and delivering one-on-one assistance to students regarding fundamentals of Visualization Software Development using Python and Maya

COMPUTER ENGINEERING PATENT EXAMINER – USPTO 2021 - 2022

Examined patent applications relating to Computer Error Control, Reliability, and Control Systems to determine whether the claimed invention is patent-eligible.

SOFTWARE DEVELOPER INTERN – NT-CONCEPTS 2019 - 2020

Developed web application for a Non-profit client, The Corps Network for a full lifecycle software development process using Agile/Scrum process