CHARLES WANG *SOFTWARE DEVELOPER & 3D CREATIVE TECHNOLOGIST*

EDUCATION

University of Pennsylvania, School of Engineering and Applied Science
  Department of Computer and Information Science
    B.S.E. Digital Media Design, 2018
    M.S.E. Computer Graphics & Game Technology, 2018

EXPERIENCE

METHOD STUDIOS, Pipeline Technical Director

Nov 2019 - Present

- Develop proprietary software to improve artist efficiency with tools such as Maya, Houdini, Nuke and workflows such as render farm management, OCIO color management, and footage ingestion.
- Produce code for QT-based UI tools, as well as backend services for asset management databases.
- Maintain working and delivery configuration environments for commercial and feature film VFX (visual effects) projects within the global studio.
- Act as first point of contact for all pipeline questions from artists, supervisors and producers.
- Spearheaded GPU rendering integration (Redshift3D, Vray RT) in Method's global proprietary render farm submitter.

Jul '18 - Oct '19

- Assistant Technical Director

UNIVERSITY OF PENNSYLVANIA, Computer Science Teaching Assistant

Jan 2015 - May 2017

- Assisted in teaching masters-level university courses in Computer Graphics topics with curriculum planning, office hours and special topics sessions.
- Computer science topics include C++ for polygon data structures, viewing transforms and pathtracing - CIS460/560 and CIS461/561.
- 3D Computer Modeling classes include Autodesk Maya and Zbrush for modeling, sculpting, animation, and rendering - FNAR 235 and FNAR366.

BIOSTREAM TECHNOLOGIES, Programming and Game Design Intern

May 2016 - Aug 2016

- Supported development of video game therapies for autism.
- Designed algorithm using performance to scale level difficulty for effective therapy engagement.

CG@PENN - UNIVERSITY OF PENNSYLVANIA, Research Assistant

May 2015 - Dec 2015

- Built an accurately scaled model of Reading Terminal Market in Unity and Maya with crowd simulation behavior for a research paper submitted to SIGGRAPH.
- Developed a heat-mapping system with interactive heat sources to drive crowd movements based on variable comfort thresholds.

LANGUAGES

C, C++, C#
Python, GLSL
Javascript/Typescript
Java, HTML, CSS

TECHNICAL SKILLS

Software Development
Git/Version Control
Bash/Linux
OpenGL, CUDA
WebGL/Three.js
Node.js/npm
QT GUI, React.js

VFX Pipeline Tools
Virtual Reality
GPU Programming
Procedural Graphics
Game Development

3D SOFTWARE

Maya, Zbrush, Houdini
Unity, Unreal Engine
Arnold, Redshift
Substance Painter

CREATIVE SKILLS

3D Modeling
Lighting/Lookdev
Rigging/Animation
Motion Graphics
Game Design

CONTACT

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