CHARLES WANG

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

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PROFESSIONAL SKILLS

Languages

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

Technical Skills

Software Development
Virtual Reality
Rendering
GPU Programming
Procedural Graphics
Game Development

VFX Pipeline Tools
Git/Version Control
Rez Packaging
Bash/Linux
WebGL/Three.js
Node.js/npm

3D Software

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

Creative Skills

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

WORK EXPERIENCE

Assistant Technical Director
July 2018 - Present

Method Studios   New York, NY
• As part of the Pipeline Team, provide technical show support and set up for commercial and feature film VFX (visual effects) workflow.
• 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.
• Act as first point of contact for all pipeline questions from artists, supervisors and producers.
• Spearheaded Redshift integration in Method's global proprietary render farm submitter.

Teaching Assistant
Jan 2015 - May 2017

University of Pennsylvania   Philadelphia, PA
• 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.

Programming and Game Design Intern
May 2016 - Aug 2016

BioStream Technologies   Philadelphia, PA
• Supported development of video game therapies for autism.
• Designed algorithm using performance to scale level difficulty for effective therapy engagement.

Research Assistant
May 2015 - Dec 2015

CG@Penn - University of Pennsylvania   Philadelphia, PA
• 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.