

# 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

### 3D Software

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

### Languages

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

### 2D Software

Photoshop  
Illustrator  
Premiere Pro  
After Effects

### Technical Skills

Rendering  
GPU Programming  
Game Programming  
Procedural Graphics  
Virtual Reality

### Creative Skills

3D Modeling  
Lighting/Rendering  
Texturing  
Rigging/Animation  
Game Design

## WORK EXPERIENCE

### Assistant Technical Director

July 2018 - Present

Method Studios New York, NY

- \* Show set-up and support for visual effects pipeline
- \* Develop and maintain proprietary software

### Teaching Assistant

Jan 2016 - May 2017

University of Pennsylvania Philadelphia, PA

- \* CIS461/561 (Advanced Rendering) Spring 2017
- \* FNAR366 (Advanced Computer Modeling) Spring 2017
- \* CIS460/560 (Interactive Computer Graphics) - Spring 2016, Fall 2016
- \* FNAR235 (3D Computer Modeling) - Fall 2016, Spring 2017

### Programming and Game Design Intern

May 2016 - Aug 2016

BioStream Technologies Philadelphia, PA

- \* Supporting project developing video game therapies for autism
- \* Unity and C# development, game therapy design

### Research Assistant

May 2015 - Dec 2015

CG@Penn - University of Pennsylvania Philadelphia, PA

- \* Built an accurately scaled model of Reading Terminal Market in Unity/Maya
- \* Implemented a heatmapping system with interactive heat sources

## RECENT PROJECTS

### Propuga

Senior Design Project

3D web puzzle game where puzzles are procedurally generated  
Applied Skills: Javascript, 3js, WebGL

### OBSCURA

3D Puzzle/Adventure Game

1st Place Overall Winner at Penn Play Game Jam Spring 2016  
Contribution: Level Design, Modeling, Texturing, Lighting  
Our team later adapted Obscura as a third-person puzzler in Unreal Engine

### Monte-Carlo Pathtracer

Multiple Importance Sampling, Depth of Field, BVH Acceleration  
Later developed a GPU version with BVH acceleration  
Applied Skills: C++, OpenGL, CUDA, QT Creator