

# CHARLES WANG

## MOBILE

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## WEBSITE

charlesliwang.com

## EMAIL

chawang@seas.upenn.edu

## EDUCATION:

University of Pennsylvania  
Engineering and Applied Sciences  
B.S.E in Digital Media Design  
Expected Graduation: 2017

University of Pennsylvania  
Engineering and Applied Sciences  
M.S.E in Computer Graphics and Game Technology  
Expected Graduation: 2018

Shanghai American School, Pudong Graduate (2013)  
National Honor Society Executive Member, Literary Society Co-Founder  
"Unplugged" Charity Concert Organizer and Founder

Teaching Assistant      ACM Siggraph Mentor

**Relevant Courses Taken:** Advanced Computer Graphics (Rendering) || Interactive Computer Graphics || Physically Based Animation (Fluid Simulations) || Algorithms || Software Engineering || Data Structures || Automata, Computability, Complexity || Multivariable Calculus || Linear Algebra || Physics I (Mechanics) & II (E/M) || Advanced 3D Computer Modeling and Sculpture

## Professional Skills

### 3D Software:

Modeling:  
Maya, Houdini, Zbrush

Texturing:  
Mudbox, Substance Designer  
Substance Painter

Rendering:  
mental ray, Renderman

Game Development:  
Unity

### Programming Languages:

Proficient: C, C++, C#, Java, Python,  
Unix, HTML, CSS  
Familiar: OCaml, Assembly,  
Verilog, VHDL

### Adobe Software

Photoshop, Illustrator, After Effects  
Premiere Pro

### Microsoft Office

Word, Excel, Powerpoint

### Technical Skills

OpenGL  
Animation  
Mesh Manipulation  
Rendering  
Proceduralism  
Fluid Simulation

### Creative Skills

Character Design  
3D Modeling  
Texturing  
Rigging/Animation  
Game Design  
Graphic Design

### Other Skills

Communication, Project Management  
Teaching, Research, Presentation

## Work Experience

### TEACHING ASSISTANT

#### CIS277

Computer Graphics  
University of Pennsylvania

January 2016 - Present

- \* Assist in the teaching and planning of Sophomore/Junior level class
- \* Focusing on C++, Linear Algebra, Mesh Structures, OpenGL
- \* Hold office hours, grade homeworks, write exam questions

### RESEARCH ASSISTANT

#### CG@Penn

University of Pennsylvania

May 2015 - Present

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

### TEACHING ASSISTANT

ESE171 Digital Design Lab  
University of Pennsylvania

January 2015 - May 2015

- \* Dictate curriculum and teach 3-hour labs to help students apply lecture topics

### TELLER

Student Federal Credit Union  
University of Pennsylvania

January 2014 - September 2014

- \* Worked with FedComp to handle student accounts

## Recent Projects

### OBSCURA (2016) - 3D Puzzle/Adventure Game

Developed in 24-hours at Penn Play Game Jam  
with a team of 4 members

#### 1st Place Winner

Level Design, Modeling, Texturing, Lighting

### Mini Maya (2015) - Final Project

Programmed a primitive version of Autodesk Maya  
Mesh Manipulation, Rigging, Animation, Shading  
Applied Skills: C++, OpenGL, QT Creator

### Working Dog Center Helper (2015)

Worked with a small team to create a dog-treatment  
tracking app for the Working Dog Center in Philadelphia.  
Helps trainers and doctors log and view dog's activities  
Applied Skills: Android, Java, Databasing, UI

### Monte-Carlo Pathtracer (2015) - Final Project

Depth of Field, Acceleration Struction  
Applied Skills: C++, OpenGL, QT Creator