

OBJECTIVE

Looking for graphics software engineering roles working on studio tools

EDUCATION

Stanford University
Computer Science
(B.S.), Graphics
Art Practice (B.A.)
Grad date: Jun 2020
GPA: 3.8

SKILLS

Programming Languages



 C++  C
 Python  Java

Programming Skills

 Object-oriented
 UNIX/Linux

See my work at
www.github.com/mjyip8

Other:

 Scrum Methodology
 Maya

INTERESTS

Computer Graphics,
Animation, Women in
STEM, Oil Painting,
Running half marathons

WORK EXPERIENCE

Microsoft Explore Intern (PM/Software Dev)

- ▶ Used Javascript to process data client-side for displaying charts of real-time transactions.
- ▶ Created pop-up notifications feature with Javascript, based on user customization and abnormal traffic

Jun
– Sept
2018

PROJECTS

Simulating Four Legged Animal Walking (in progress)

- ▶ Implemented Catmull-Rom splines and spring-mass system for animal body in C++ and OpenGL
- ▶ Inspired by paper Footprint-Based Motion Synthesis by Torkos (1998)

May
2018
–
Now

Shading experiments

- ▶ Implemented Phong reflectance in C++ and OpenGL
- ▶ Added environment lighting from environment map
- ▶ Added normal mapping for surfaces

May
2018

Mesh Editor

- ▶ Implemented Catmull Clark subdivision, linear subdivision and loop subdivision with C++

May
2018

SVG Rasterizer

- ▶ Anti-aliased edges with super-sampling with C++
- ▶ Implemented transforms for zooming capabilities

April
2018

Raytraced image of Terrace at Sunset

- ▶ Created depth of field effect with C++ and OpenGL
- ▶ Changed shadow rays to travel through glass

Nov
– Dec
2018

ORGANIZATIONS

Stanford Women in Computer Science
External Events Chair

- ▶ Coordinate educational events about interdisciplinary careers in Computer Science
- ▶ Lead planning for Spring Distinguished Speakers series

2017 -
2019