Crystal Lee

Address: 3925 Walnut St, Philadelphia, PA 19104 Phone: (215) 687-5553 E-Mail: leecr@seas.upenn.edu

Education

University of Pennsylvania, School of Engineering and Applied Science **Philadelphia, PA**

BSE in Digital Media Design, Dept. of Computer and Information Science, May 2019

Relevant Coursework

Graphics: Physically Based Animation*, Computer Animation*, Interactive Computer Graphics; Advanced Computer Graphics; 3D Modeling; Data Visualization, Art, Design, and Digital Culture

Software: Software Design/Engineering; Automata, Computability, and Complexity; Introduction to Algorithms; Programming Languages and Techniques I & II

* = currently enrolled in

Skills

Programming Languages: C++, OpenGL, Java, HTML, CSS, Javascript, JQuery, Bootstrap, OCaml, Swift

Graphics: Adobe Creative Suite (Photoshop, Illustrator, InDesign), Autodesk Maya, Google Sketchup

Languages: English, Korean, basic Spanish

Work Experience

Walt Disney Animation Studios – Los Angeles, CA; Software Engineering Intern **Summer 2018**

· Worked in the Production Technology department at Walt Disney Animation Studios as a summer intern.
· Developed for Meander, the most popular drawing engine for applications across the Disney Studios.
· Explored tile-based rendering and the support for Apple's Metal renderer.

SIG Center for Graphics – Philadelphia, PA; Research Assistant **Summer 2017**

· Conducted research under Dr. Norman Badler and the Penn Arts Council Grant (see Projects for details).

Projects

3D Visualization Research Project (Penn Arts Council Grant) **Summer 2017**

· Collaborated with Matterport Scans to acquire 3D scanned models of the Penn Museum's Native American exhibit and the SIG center for Graphics.
· Used HTML, Javascript and CSS to connect them, add labels, and hide specific sections for security or aesthetic reasons.
· Worked under Dr. Norman Badler.

UPenn Transplant Rehabilitation App **Spring 2017**

· Developed a web application to rehabilitate patients after liver, lung, or kidney transplants, which will soon be used by real medical practitioners at the Hospital of the University of Pennsylvania. Communicated with a client to determine what features were needed, and presented deliverables in two-week iterations.
· Worked with two team members over the course of eight weeks using Javascript, HTML, and CSS.
· Gained experience with both frontend and backend database management.

Monte Carlo Path Tracer **Spring 2017**

· Created a Monte Carlo Path Tracer renderer using C++ and OpenGL. Worked alone over the span of 7 weeks, with a deliverable due each week.

Mini Minecraft **Fall 2016**

· Replicated the video game "Minecraft" over three weeks using C++ and OpenGL with two team members.

PennApps XIII **Spring 2016**

· Created a game application using Swift with two other team members.

Activities

Korean Student Association, Member **Fall 2015 – Present**

Women in Computer Science, Member **Fall 2015 – Present**