

# CHLOE LE

CHLOELE.COM

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## EDUCATION

**UNIVERSITY OF PENNSYLVANIA:** School of Engineering and Applied Science, Philadelphia, PA

**MSE:** Computer Graphics and Game Technology, May 2020

**BSE:** Computer Science: Digital Media Design, May 2019

**Minor:** Data Science

**Cumulative GPA:** 3.77/4.00

**Relevant Coursework:** Programming Languages & Techniques; Data Structures & Algorithms; Computer Graphics; Automata, Computability, and Complexity; Computer Systems; Machine Learning; Computer Animation; 3D Modeling; Integrated Product Design; Statistics/Probability; Statistical Inference; Linear Algebra; Design and Digital Culture

**Current Courses:** Mobile App Development; Database & Info Systems; Scalable & Cloud Computing

## TECHNICAL SKILLS

**PROGRAMMING:** Java, C++, JavaScript, Python, C, HTML/CSS, SQL, MySQL, Processing, Kotlin

**3D SOFTWARE:** Maya, Mudbox, ZBrush

**DESIGN:** Photoshop, Illustrator, InDesign

## PROFESSIONAL EXPERIENCE

**THE NEW YORK TIMES – Software Engineering Intern, Marketing Technology Team**

June – Aug 2018

- Worked on and led the Advanced Frontend Monitoring project for Magnolia, a content management system
- Created a monitoring system to consume necessary information of all pages that were built and hosted by Magnolia using JavaScript; ensured that page performance and operations are not affected and that the number of asset requests is kept low using singleton and queue design
- Set up dashboards to visualize collected data and set up notifications/alerts based on thresholds
- Saved the team's time by automating monitoring process and allowed for data driven decisions based on collected data

**SHANGHAI MEDIA GROUP – Software Development Intern, Technology Team**

May – Aug 2017

- Designed and built customized tools for image processing, file systems, and user database to assist SMG's internal production pipeline. Programmed mainly in Python, for both Windows and macOS environments
- Collaborated with technical directors on 3D software scripts' bug fixes

**APCO WORLDWIDE – In-house Design/Social Media Intern**

May – Aug 2016

- Designed presentations and report layouts for clients
- Worked with managing directors and communications team on strategic communication through social media for clients

## PROJECTS

**PHYSICALLY-BASED RENDERING ENGINE** (C++, Qt, OpenGL)

Programmed a rendering engine that supports naive, direct lighting, indirect lighting, and photon mapping renders. Focused on physically based rendering using path tracers built from scratch. Users can load customized OBJ files and run the renderer.

**FOODIEGRAM** (JavaScript, HTML, CSS, MongoDB)

Built a social media web application that allows users to maintain profiles, share images, and follow other users. It is a platform for foodies to easily upload food pictures and be able to save favorite posts, give ratings, and interact with others.

**TRANSPLANT REHABILITATION OPTIONS APP** (JavaScript, HTML, CSS)

Built a web application with two other members for the Penn Medicine Center. Allows physicians to provide customized resources and plans to patients for their physical therapy regimen prior to transplantations. Patients can take surveys and write journals so physicians understand patients' situations.

## ACTIVITIES

**WHARTON UNDERGRADUATE HEALTHCARE CLUB**

Sep 2015 – Present

- Director of Design: create info-graphics and design layouts for *Penn Healthcare Review*, a healthcare journal

**SIGGRAPH MENTORING PROGRAM**

Jan 2018 – Present

- Mentor: mentor and answer questions of peer undergraduates who are interested in Computer Graphics

**WOMEN IN COMPUTER SCIENCE**

Aug 2018 – Present

- Mentor: mentor and answer questions of peer undergraduates who are interested in Computer Science

**PENN FASHION COLLECTIVE**

Sep 2015 – May 2018

- Graphic Designer: created graphics and advertising materials for the marketing committee