Di Lu

646-924-6257 | Philadelphia, PA • Hamden, CT | dlu36@seas.upenn.edu | dluisnothere.github.io
https://www.linkedin.com/in/di-lu-0503251a2/

EDUCATION

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

- BSE in **Computer Science & Computer Graphics (Digital Media Design)**   *SEP 2018 - MAY 2022*
  - Cumulative GPA: 3.51/4.00
  - Relevant Coursework: Advanced Rendering (C++/GLSL), Applied Machine Learning (Python), Scalable & Cloud Computing (AWS, Node.js, Apache Spark), Introduction to Computer Graphics (C++/OpenGL), Data Structures & Algorithms (Java), Mathematical Foundations of Computer Science (Discrete Math)
- MSE in **Computer Graphics & Game Technology**   *JAN 2021 - MAY 2023*

WORK EXPERIENCE

Software Development Engineer Intern   **Seattle, WA**
Amazon   *JUN 2021 - AUG 2021*

Teaching Assistant, Introduction to Computer Graphics (CIS 460/560)   **Philadelphia, PA**
University of Pennsylvania   *JAN 2021 - PRESENT*

- Held office hours to help students debug projects in rasterization, OpenGL, half-edge mesh, and mini Minecraft.
- Responsible for grading quizzes and homeworks, and answering conceptual/debugging questions on Piazza.

Tutor, Mathematical Foundations of Computer Science (Discrete Math)   **Philadelphia, PA**
UPenn Weingarten Learning Resources Center   *FEB 2020 - JAN 2021*

- Group tutoring to students who are taking discrete math, providing study tools and leading through homework and lectures, running exam prep review sessions

LEADERSHIP & PROJECT EXPERIENCE

Monte-Carlo Pathtracer - *CIS561 Advanced Rendering*

- Built a Monte-Carlo path tracer in C++ with lighting integration (Naive, Direct Lighting, Full Lighting) and material models.

IMDB Sentiment Analysis Classifier - *CIS419 Applied Machine Learning*

- Used sklearn package in python and Stanford + Cornell datasets to train 5 ML models with Bag of Words and TFIDF representation of words to produce sentiment analysis of IMDB film reviews.

Mini-Minecraft - *CIS560 Introduction to Computer Graphics*

- Created Minecraft in C++, wrote an efficient chunk-based terrain rendering method; Wrote shaders in OpenGL that applies minecraft textures from a file to surface of blocks; Wrote time-based shaders to animate water and lava; Implemented NPC movement and collision to navigate terrain.

Mini-Facebook, Front-End Developer - *NETS212 Scalable & Cloud Computing*

- Built a Facebook app on a team of four using Node.js. Designed and coded page layouts in ejs, implemented live posts/comments/search bar suggestions via .ajax. Gained Database experience with Amazon AWS and Dynamodb

Marketing Chair/President 2021-2022
UPGRADE (UPenn Game Research & Development Environment Club)

ACTIVITIES & VOLUNTEER

AMC SIGGRAPH Conference Student Volunteer (August 2020)
National Student Leadership Conference (Game Design) (2016)

- Designed a video game in Unity 3D within 10 days in a team of three students

TECHNICAL SKILLS AND INTERESTS

Languages (fluent): English, Mandarin
Programming: Java, C/C++, React Native, JavaScript
Creative Programs: Adobe Creative Suite, Unity 3D, Autodesk Maya, ZBrush
Music: Classic vocal (4+ years), flute (9+ years)