

# Thomas Glezen

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## Education

### UC Berkeley

May 2021

B.A. IN COMPUTER SCIENCE

GPA: 3.1

## Coursework

### Undergraduate

CS 61B: Data Structures

CS 61C: Machine Structures

CS 161: Computer Security

CS 170: Algorithms

CS 182: Deep Neural Networks

CS 184: Computer Graphics

CS 186: Databases

CS 188: Artificial Intelligence

CS 189: Machine Learning

EE 126: Probability and Random Processes

EE 127: Optimization

Stat 140: Probability

Stat 135: Statistics

Data 100: Data Science

Data 102: Data, Inference, and Decisions

## Skills

### Programming

Proficient in:

Python • NumPy • pandas • PyTorch • SQL

Also coded in:

R • Java • C • Bash • HTML • Swift • JS

### Tools

Vim • Jupyter Notebook • IntelliJ

### Other

Git •  $\text{\LaTeX}$

Docker • Debugging

## Links

Github:// [tcglezen](#)

LinkedIn:// [tcglezen](#)

Website:// [tcglezen.com/](#)

Stackoverflow:// [tcglezen](#)

## Experience

### Loak Software Engineer

Aug 2020 – Present | Berkeley, CA

- Designed new interface for the iOS app for Loak using Swift.
- Resolve dependency issues and wrote documentation for future employees.

### Lab Assistant | CS61B (DATA STRUCTURES)

Aug 2018 – Dec 2018 | Berkeley, CA

- Taught students implementation of data structures.
- Helped students with project design and code debugging.

## Projects

### Path Tracer

Project revolving around light modeling of 3D images.

- Implemented camera ray generation so camera can generate 2D image given a 3D world and a direction/location
- Built a volume bounding hierarchy system to optimize rendering time for tracing path of light rays of 3D models.
- Coded bidirectional scattering distribution function which calculates how light reflects off of different types of surfaces.
- Programmed the model so that it can efficiently trace bounces after a hundred bounces.
- Further optimized the project in order to better perceive light coming from a single source point.

### IBM Good Tech Scholars Program

- Designed a project which improves virtual education.
- Integrated IBM Cloud for storing video data and transcript.
- IBM Watson for speech to text transcription and sentiment analysis.
- Implemented Bootstrap for visual improvements.

### Language Recognition

- Developed a convolution neural network to detect language of sentence.
- Parses sentence word by word in order to understand what language the sentence is in.
- Performed with 83% accuracy