# Thomas Glezen

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# Experience

#### **Loak Software Engineer Intern**

#### Aug 2020 - December 2020 | Berkeley, CA

- Collaborated with team to improve Loak's iOS app.
- Designed UIUX for Loak's on boarding process.
- Connected Firebase and Loak iOS app to display available products.
- Posted ads on Facebook and analyzing data from users who came from Facebook ads.

## **Lab Assistant/Tutor** | CS61B (Data Structures) Aug 2018 – December 2019 | Berkeley, CA

- Lab assistant for students taking data structures (CS61B) at UC Berkeley.
- Demonstrated to students how to use git and resolve their git issues.
- Instructed students on how searching algorithms such as Dijkstra and A\* work as well as how to implement them.
- Taught students the concept run time complexity and demonstrated how to calculate run time complexity of algorithms.

# **Projects**

#### **Path Tracer**

#### Feburary 2021 - April 2021

- Project modeling light rays of 3D images using C++.
- 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.
- Implemented adaptive sampling in order to better perceive light coming from a single source point.

## **Language Detection**

#### November 2020 - December 2020

- Developed neural network using NumPy that processes sentences and predicts its language.
- Modeled a naive recurrent neural network which intakes a word at each input layer.
- Applies Ensembles and dropout in order to avoid overfitting.
- Performs with an 83% accuracy on testing data.

# Education

### **UC Berkeley**

Expected Graduation: May 2021 Computer Science Major

# Coursework

#### Undergraduate

Data Structures (Tutor)

Machine Structures

Computer Security

Algorithms

Deep Neural Networks

Computer Graphics

Databases

Artificial Intelligence

Machine Learning

Probability and Random Processes

Optimization

Probability

Statistics

Data Science

Data, Inference, and Decisions

# Skills

### **Programming**

Python • NumPy • pandas • SQL • C++

PyTorch • R • Java • C • Bash • HTML • JS

#### **Tools**

Vim • Jupyter Notebook • Intellij

### Other

Git • ATEX

Docker • Debugging

# Links

Github://tcglezen

LinkedIn://tcglezen

Website://tcglezen.com/

Stackoverflow://tcglezen

# Extracurricular

Student Association for Applied Statistics (SAAS)

Computer Science Mentors (CSM)

Computer Science Student Association (CSUA)