# SHELDEN SHI

Berkeley, CA · shelden@berkeley.edu · Portfolio · GitHub · LinkedIn

#### **EDUCATION**

## University of California, Berkeley

Aug 2019 - May 2023

B.A., Computer Science

GPA: 3.88

B.A., Cognitive Science

#### **Relevant Courses**

- Structure & Interpretation of Computer Programs (4 Python projects), Data Structures (4 Java projects), Machine Structures (C, RISC-V), Discrete Math and Probability, Designing information Devices and Systems, Foundations of Data Science (4 Data Science projects, Python)
- Machine Learning (Coursera, by Andrew Ng): Learned to implement and apply machine learning algorithms to novel problems. Al for Medicine (Deeplearning.Al): Learned about the nuances of working with both 2D and 3D medical image data, for multi-class classification and image segmentation.

#### **EXPERIENCE**

# Institute for Security and Technology (IST), San Francisco, CA

May 2020 - Nov 2020

### Machine Learning Intern

- Incremented organization's document processing speed by 400% by automating the process with Python.
- Trained NLP translation models for 3 languages and implemented a document translator using Python.
- Collaborated with the publication team to launch an open-source <u>Virtual Library</u> to distribute 400+ Internet Security-related educational resources to the global community.

UC Berkeley, Berkeley, CA

Aug 2020 - Present

#### **Research Assistant**

- Designed Machine Learning pipeline and visualization tools to analyze data from police body cameras.
- Building an AI system to detect negative emotion from vocalizations recorded by body cameras worn by police and developing a warning system for police officers.

# Daily Chinese LLC, Shanghai/Detroit, MI

**Summer 2018 - Spring 2019** 

#### **Founder**

- Directed a team of 6 including 2 experienced Mandarin professors from *Shanghai International Studies University* to develop a Chinese learning App.
- Later, sold the app to *Shanghai Yunxuan Information Technology Ltd.* for \$50,000 and is now <u>the best reviewed</u> <u>Chinese learning app</u> on Apple App Store

#### **HIGHLIGHTED PROJECTS**

#### Biomedical Literature Visualizer (Team Project), GitHub

Aug 2020 - Oct 2020

- Lead a team of 4 to build an open-source tool that helps to analyze large sets (200,000 +) of research papers.
- Enabled researches/ doctors/ patients to visualize and discover potential relationships between papers and entities by applying NLP and Graphic algorithms.

## Lines of Action Board Game AI, (1-Person Project)

Feb 2020 - Apr 2020

- Built the game in Java and implemented machine player with alpha-beta pruning and minimax algorithm.
- Ranked 2/1700 in the tournament competing against other classmates' algorithms.

## Gitlet, (1-Person Project)

Apr 2020 - May 2020

• Designed and implemented a version control system that is similar to Git using Java.

#### **LEADERSHIP**

#### Ideas on Consciousness (Student Club)

Aug 2020 - Present

## President

Designed and instructed a student-taught class at Berkeley on artificial intelligence and consciousness.

#### UC Berkeley CS Tutor

Jan 2020 – May 2020

- Provided in-person instruction to 10 CS61A students with class materials and achieved grade improvement in 100% of students tutored over a five-month period.
- Helped students assemble lesson plans to keep them on track with the class material and mentored them with personal projects to further practice the skills learned from the course.

## **SOFTWARE SKILLS**

- **Programming Language**: Python3, Java, C, SQL, HTML, JavaScript, MATLAB
- Other: Cloud Computing(Azure, Google Cloud), Git, Linux, Microsoft Office, React, NodeJS, Spark, TensorFlow