

# Kaily Liu

(609) 401-0503 | kliu279@gmail.com | <https://kailyl.github.io/>

---

## EDUCATION

### **University of Pennsylvania**

Candidate for Bachelor of Science in Engineering in Computer Science and Bachelor of Science in Economics GPA: 3.93

Relevant Coursework: Programming Languages and Techniques, Mathematical Foundations of Computer Science, Data Structures and Algorithms, Networked Life, Market and Social Systems on the Internet

### **Hopewell Valley Central High School**

High School Diploma

GPA: 4.64

## EXPERIENCE

### **Computational Social Sciences Lab - Research Assistant | Philadelphia, PA**

December 2021 - present

- Conducted research on group dynamics under Duncan Watts.
- Created 11 multi-player and single-player tasks using ReactJS, NodeJS, and the Empirica framework.
- Systemized identification of collaboration and competition among groups of players.
- Presented findings to a team of researchers at the University of Pennsylvania and Massachusetts Institute of Technology.

### **The Daily Pennsylvanian - Data Analyst | Philadelphia, PA**

January 2022 - present

- Parsed data from Google Analytics, Survey Monkey, and Instagram Analytics using Python's Pandas and NumPy libraries.
- Lead analysis of trends among tagged articles on the Daily Pennsylvanian website on a team of 10 students.
- Uncovered patterns among tag locations and pairings, slug and title length, web traffic, and page location for search engine optimization.
- Presented findings to The Daily Pennsylvanian Editorial Board using quantitative analysis and visuals bi-monthly.

### **University of Pennsylvania - Access Services Student Assistant | Philadelphia, PA**

August 2021 - December 2021

- Assisted at the Circulation Desk and Scanning Department at Penn's Van Pelt Library.

## PROJECTS

### **Analysis of the U.S. Senate Committees**

April 2022 - May 2022

- Scraped information from Wikipedia and the U.S. Senate website using JSoup to develop a graph that traces committee involvement of senators.
- Used graph algorithms to analyze the correlation between seniority and influence in committees.

### **2048 Game**

December 2021

- Utilized Java and Java Swing to implement 2048.
- Added features of scorekeeping, saving games, and undoing moves using I/O.

### **Beam**

February 2020 - March 2020

- Created a scheduling app using Java in Android Studio. Stored user data using SQL.

### **Personal Website**

October 2020 - November 2020

- Used HTML, CSS, and Javascript to create a personal website. <https://kailyl.github.io/>.

## Technical Skills

**Programming:** Java, Python, OCaml, SQL

**Web Design:** React, HTML, CSS, JavaScript, Figma

## ACTIVITIES

### **Society of Women Engineers**

Jan 2022 - present

- Girls in Engineering And Related Sciences (GEARS) day; communicated with local high schools and students to organize educational resources for students in understanding more about different STEM Majors.

### **Women in Computer Science**

October 2021 - present

- Sponsorship Committee; communicated with companies (Google Cloud, Blackrock, etc.) to recruit mentors and funding for FemmeHacks, UPenn's hackathon for women, non-binary, and gender non-conforming people.

### **SEAS Wellness**

September 2021 - present

- Marketing Committee; create content on social media using Canva to spread awareness about wellness resources and events.