

## Jack Sun

(805) - 886-2092 | zhijians@andrew.cmu.edu

### Education

---

**Carnegie Mellon University** (dean's honor list) Pittsburgh, PA May 2025  
*Dual Degree in Information Systems and Linguistics; Minor in Computer Science*  
**University of California Santa Barbara** (dean's honor list) Goleta, CA 2021-2022  
**The Governor's Academy** (graduated cum laude) Byfield, MA May 2021

### Skills

---

**Computer Skills:** C, Java, Python, html, SQL, R, Ruby, MapReduce

**Languages:** Chinese, English, Latin, German, French

### Research Experience / Projects

---

**World Languages Data Visualization** Feb 2024

- Implemented geographical mapping techniques to visualize language diversity and distribution worldwide
- Created linguistic visualizations, such as language family tree, f0 pitch contour graph;
- Interactive visualizations accessible at: <https://jacksun815.github.io/wals>

**Python Game Development: Romance of the Three Kingdoms** November 2023

- Designed and developed a Zelda style adventure game using Object Oriented Programming in Python. The game was based on the historical period of the Chinese Three Kingdoms time period.
- Demo video: [https://youtu.be/mujMOqb\\_aog](https://youtu.be/mujMOqb_aog)

**Rezonator Project** November 2021- June 2022

- Utilized R scripts to import a new discourse dataset into the Rezonator app, a gamified application designed for linguistic discourse analysis.

**French National Centre for Scientific Research Language Documentation Project** Fall 2021- Summer 2022

- Processed audio recordings for *Qiangyu*: segmented audio into intonation units; transcribed part of the audio; analyze the syntax and phonetics of the language

**Coral Fish Detection & Identification** Summer 2019- Spring 2020

- Designed an AI program to track and identify coral fish numbers and species through underwater footage; model achieved 90 percent accuracy after training
- Paper published by IOP: Journal of Physics <https://iopscience.iop.org/article/10.1088/1742-6596/1650/3/032012>

### Volunteer / Work Experience

---

**Chalfant Run/Thompson Run Watershed Association: Board Member** Summer 2023 - present

- Built website and managed watershed data, currently hosted at: <https://jacksun815.github.io/>
- Organized community involvement events: firefly hike / garden work; Managed social media accounts

**Carnegie Mellon University: Resident Assistant** Summer 2023 - present

- Collaborated with other RAs, CA, and Housefellow to enforce community standards for 300+ residents in the building; Organized weekly events for 25+ residents; Presented and received funding to customize 150 sweatshirts for residents.

**Making Hands Lab: Research Assistant** Spring 2022 - Summer 2022

- Assisted Professor Lina Ho from UCSB Linguistics Department in daily lab duties; helped to build the website for the sign linguistics lab.

### Extracurricular

---

**CMU Varsity Rowing:** placed 5<sup>th</sup> out of 19<sup>th</sup> at the head of Occaquan Regatta [Fall 2022-present]

**Intervals Acapella:** Bass and Beatboxer; Performed at local events and hosted concerts [Winter 2021-Spring 2022]

**Busking:** Performed live looping and saxophone in the mall at my hometown [2019-present]

**Classical Chinese Latin Translation:** Translated classical Chinese poems into English and Latin [2019-present]

**Beatboxing Club:** cofounder of the club; led beatbox battles and showcases [2019-2021]