



+1 (412) 736-8371



qianoum@andrew.cmu.edu



<https://mqo00.github.io/>

## Skills

### Programming:

Python, C, SML, R, Go, JavaScript,  
HTML, CSS, React, Jekyll, Git, LaTeX

### Natural Language:

Mandarin, English

### Research:

SPSS, ELAN, Gorilla, Google Analytics

### Design Tool:

Adobe (AE/PS/AU), Audacity, Figma

## Relevant Coursework

<i>Personalized Online Learning</i>	F21
<i>Design Educational Game</i>	S21
<i>Educational Goal, Assessment &amp; Instruction</i>	F20
<i>Intro to Machine Learning</i>	F20
<i>Human Learning &amp; Optimize</i>	S20
<i>Neural Correlates of Learning &amp; Memory</i>	S21
<i>Child Development Principles</i>	S19

## Grants & Fellowships

DC Honor	(\$6500)	2021
Travel Award	(\$250)	2021
SURF	(\$3500)	2020
SURG	(\$500)	2020
Ireland Fund	(\$1750)	2019

## Personal Interests

Museum Visiting, Roller Coaster  
Riding, Musical Theatre, Archery

# CHRISTINA MA

## Education

Carnegie Mellon University, Pittsburgh, PA

*Sept. 2018-May 2022*

B.S. in Cognitive Science | B.S. in Computer Science | Minor in Design for Learning | QPA: 3.91/4.0

## Research Experience

### Honor Thesis Project, CS Game Design Support Research

*Mar. 2021-present*

- Conduct a quasi-experiment case study to investigate how the forms and presentation of learning science principles influence designer-teacher collaboration in CS educational game designs
- Submitted a work-in-progress as the first-author at at 2021 CHI-Play Conference

### Independent Study, VR Education Research

*Jan. 2021-present*

- Conducted a case study on integrating VR technologies into an interdisciplinary first-year seminar
- Analyzed data of student learning and perception of VR with descriptive coding method
- Published a work-in-progress as the first-author and presented at 2021 iLRN Conference

### Research Assistant, Cognitive Linguistics Lab

*Sept. 2020-Dec. 2020*

- Selected a stimulus set and designed a counterbalanced experiment with PMI & log-likelihood scores to explore different semantic relations' influence on language production
- Implemented a picture-naming typing online experiment using jspsych, psiTurk, and MTurk

### Research Assistant, Cognitive Development Lab

*Feb. 2019-Aug. 2020*

- Helped investigate word relations' influence on children's semantic acquisition; calculated and analyzed language statistics(GloVe, LSA, PMI) from corpus (Childes, Wiki, Common Crawl, TASA)
- Assisted lab tasks, coded PPVT scores, collected data from SpAM tasks with 3- to 5-year-olds

### Independent Study, Carnegie Museum of Art Website Research *Sept. 2019-May 2020*

- Designed a case study to improve the information design of art museums' websites for educators
- Designed rubrics, conducted a comparative analysis, a survey, and card sorting user interviews

## Teaching & Service Experience

### Teaching Assistant, School of Computer Science

*Feb. 2021-present*

- Co-led recitations, developed teaching materials, facilitated communication, hosted office hours, and graded homework for undergrad CS classes of 300+ students for 10-20 hrs/week (S21, F21)
- Assisted teaching in a pre-college CS program for underrepresented communities (Summer 21)

### President, VP of Communications, Project Advisor, Project Ignite *Nov. 2018-present*

- Innovated virtual programming and coordinated 7 teams of 70 students and advisors (S21)
- Recruited 50% more students, increased diversity, and expanded network with 5 schools (S20)
- Collaborated to lead 5 high schoolers work on a machine learning topic for 10 workshops (S19)

## Additional Experience

### Author, Operator, Individual Official WeChat Account

*Jan. 2018-present*

- Operate WeChat Account generating 3,000+ followers and an average of 1,000+ views per article
- Wrote 80+ articles and made 20+ vlogs, shared by influential platforms with 20,000+ views

### Product Design Intern, Marketing Volunteer, Expil, Inc.

*Oct. 2018-July 2019*

- Assisted user experience research for online math course and communicated with multiple teams
- Developed promotional materials and marketing plans for online talks attended by 500+ guests
- Wrote about mathematic competitions and received average view of 1,000+ on each article