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

## Skills

### Programming:

Python, C, C++, SML, R, JavaScript,  
HTML, CSS, Go, React, Nools, LaTeX

### Natural Language:

Mandarin, English

### Research:

SPSS, ELAN, Gorilla, Google Analytics

### Design Tools:

Adobe (AE/PS/AU), Audacity, Figma  
Cognitive Tutor Authoring Tools

## Relevant Coursework

*Design Artificial Intelligence Products*  
*Computer Science Pedagogy*  
*Role of Technology in Learning*  
*Personalized Online Learning*  
*Design Educational Game*  
*Educational Goal, Assessment & Instruction*  
*Distributed Systems*  
*Intro to Machine Learning*  
*Parallel Distributed Processing*  
*Human Learning & Optimization*  
*Neural Correlates of Learning & Memory*  
*Child Development Principles*  
*Artificial Intelligence & Humanities*

## Awards & Fellowships

Senior Honors (\$6500)	2021
Travel Award (\$250)	2021
SURF (\$3500)	2020
<i>Undergraduate Research Fellowship</i>	
SURG (\$500)	2020
<i>Undergraduate Research Grant</i>	
Ireland Fund (\$1750)	2019
MLK Writing 1 <sup>st</sup> Place	2019

## Personal Interests

Outdoors, Museum Visiting, Roller  
Coaster Riding, Musical Theatre

# CHRISTINA MA

## Education

Carnegie Mellon University, Pittsburgh, PA

May 2022

B.S. in Cognitive Science | B.S. in Computer Science | Minor in Design for Learning | QPA: 3.92/4.0  
Honors: Phi Beta Kappa (1 of 16 seniors selected in Fall 2021)

## 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
- Published a work-in-progress as the first-author and presented 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
- Assisted teaching in a pre-college CS program for underrepresented communities

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

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

## Additional Experience

Author, Operator, Individual WeChat Blog Account

Jan. 2018-present

- Operate WeChat Blog Account with 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