



+1(412) 736-8371



qianoum@andrew.cmu.edu



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

Skills

Programming:

Python, C, SML, R, Go, JavaScript,
HTML, CSS, React, Nools, Git, 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

Distributed Systems
Personalized Online Learning
Design Educational Game
Educational Goal, Assessment & Instruction
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
Undergraduate Research Fellowship
SURG (\$500) 2020
Undergraduate Research Grant
Ireland Fund (\$1750) 2019
MLK Writing 1st Place 2019

Personal Interests

Museum Visiting, Roller Coaster
Riding, Musical Theatre, Archery

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: 3.91/4.0
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