+1(412) 736-8371

qianoum@andrew.cmu.edu

https://mqo00.github.io/

CHRISTINA MA

Skills

Programming:
Python, C, SML, R, JavaScript, HTML, CSS, Jekyll, Git, LaTeX

Natural Language:
Mandarin (native), English (fluent)

Research: SPSS, ELAN, jspsych

Design Tool:
Adobe (AE/PS/AU), Audacity, Figma

Relevant Coursework

Design Educational Game	S21
Educational Goal, Assessment & Instruction	F20
Intro to Machine Learning	F20
Human Learning & Optimize	S20
Neural Correlates of Learning & Memory	S21
Child Development Principles	S19

Grants & Fellowships

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

Personal Interests

Traveling, Museum Visiting, Roller Coaster Riding, Musical Theatre

Education

Carnegie Mellon University, Pittsburgh, PA   *Sept. 2018-May 2022*
B.S. in Cognitive Science | Minor in Computer Science and Design for Learning | QPA: 3.89/4.0

Research Experience

Honor Thesis Project, Educational 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 educational game designs

Independent Study, VR Education Research   *Jan. 2021-present*
· Conduct a case study on integrating VR technologies into an interdisciplinary first-year seminar
· Collect and analyze data of student learning and perception of VR with descriptive coding method
· Submitted a work-in-progress paper and presented at the iLRN 2021 International 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

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)

Teaching Assistant, Principles of Functional Programming   *Feb. 2021-May 2021*
· Co-led lab sections of 20+ students, hosted office hours, and graded homework for 20 hrs/week
· Developed teaching materials and facilitated communication for the course of 300+ students

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, Expii, 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