

Cat Mai

✉ CMai@clarku.edu
🏠 catxmai.github.io
🐱 [catxmai](#)

Education

Clark University, Worcester, MA. 2018–2022
B.A. Mathematics (Honors Thesis, Advisor: Michael Satz)
B.A. Computer Science

Green River Community College, Auburn, WA. 2016–2018
High school diploma (Associate of Arts program), *High honors*, Philosophy

Research Experience

Honors Thesis, Clark University, Jun '21–Present
Advisor: Michael Satz.
Working on Hamiltonian Markov Chain for Bayesian Models (tbd) [[repo](#)]

Human-Computer Interaction Intern, Brown University, Summer '21
Mentors: Jeff Huang, Talie Massachi.

- Modified, retrained models to predict affect from finger pressure and 6dof motion replay
- Analyzed user study data for writeup and visualizations
- Reviewed literature on affect prediction and mobile computing and rewrote the paper for submission.

Human-Computer Interaction RA, Clark University, Feb '20–Jun '21
Advisor: Shuo Niu.

- Crawled over 10,000 videos that was used across multiple project and wrote the sanitization pipeline. Co-author and lead maintainer of the lab's [crawler package](#).
- Reviewed literature on parasocial relationships and online civic engagement.

Human-Computer Interaction RA, Clark University, Summer '19
Mentors: John Magee, John Garton.

- Developed proof-of-concept for a virtual garden visit for a conservation project. Rendered 3D photogrammetry models using site's photos. [[demo](#)]
- My early models have helped Dr. Garton's colleague secure a Futures grant and Dr. Garton present the project to grant boards. Project plans to resume in 2022.

Science Education RA, NGSX Learning Lab @ Clark University, Sep '18–Jun '21
Advisor: Sarah Michaels.

- Worked with the lab on teachers' talk moves in science classrooms to understand what makes science lectures productive and to improve professional development for science teachers
- Investigated effectiveness of visualization tools [[Class Discourse Analyzer](#)] for classroom talk

*RA=Research Assistant.

Work Experience

Teaching Assistant, Clark University. Aug '19–Present
Prepare solutions and grade homework. Hold weekly lab sessions and office hours.

CS 180 Automata Theory	Fa 2020
CS 120 Intro to Comp Sci-Python	Fa 2019
CS 121 Data Structures-Java	Sp 2021, Fa 2021
MATH 114 Discrete Mathematics	Sp 2020, Fa 2021
MATH 124, 125 Honors Calculus I, II	Fa 2020, Sp 2021, Fa 2021

Technician Intern, Hamilton Computer Repairs.

Nov '19–Aug '20

Shadowed technicians; performed diagnostics and hardware replacement for laptops and PC.

Publications

* = equal contribution

Conference Papers.....

- CSCW '21 Shuo Niu, **Cat Mai**, Katherine G. McKim, and Scott McCrickard. “#TeamTrees: Investigating How YouTubers Participate in a Social Media Campaign”. *ACM Conference on Computer-supported Cooperative Work*. [\[pdf\]](#).
- CHI '21 Shuo Niu, Ava Bartolome*, **Cat Mai***, and Nguyen Binh Ha*. “#StayHome #WithMe: How Do YouTubers Help with COVID-19 Loneliness?” *ACM CHI 2021 Conference on Human Factors in Computing Systems*. (Acceptance rate = 26.3%) [\[pdf\]](#).

Posters & Extended Abstracts.....

- CSCW '21 Katherine McKim, **Cat Mai**, Danielle Hess, and Shuo Niu. *Investigating Drug Addiction Discourse on YouTube*. [\[pdf\]](#). CSCW '21.
- Winter Fest '21 **Cat Mai**. *How YouTubers Participate in a Social Media Campaign: A Culture-Based Analysis of #TeamTrees*. [\[pdf\]](#). Winter Fest '21 Clark University.
- Fall Fest '19 **Cat Mai***, Tina Chiem*, and Anisha Hassan*. *Odd One Out”: Model Based Biology in an ESL Classroom*. [\[pdf\]](#). Fall Fest '19 Clark University.

Awards, Honors

2020: LEEP Research Fellow (2,500 for research)

Clark University

2018–2022: Traina Scholarship (20,000 annually, top-level awarded)

Clark University

Service

Diversity & Inclusion Committee, American Go Association.

2020–Present

- o Analyzed education initiatives, market research, and surveys for Go/weiqi nation outreach.
- o Co-directed e-US Open Tournament 2020 with around 1000 players.

Math Tutor, The Petey Greene Program.

2018–2020

- o Tutored weekly at MCI-Shirley as part of prison education program.

President of Philosophy Club, Green River College.

2017–2018

- o Held weekly discussion of readings with faculty advisor; outreach.

Tech Stack

Proficient: Java, Python, Kotlin, \LaTeX , JavaScript | **Familiar:** C/C++, R, Bash