Cat Mai

Email: cat.mai@nyu.edu Homepage: catxmai.github.io GitHub: github.com/catxmai Last updated: November 2024 EDUCATION **Ph.D. Computer Science**, New York University (NY, USA) 2022–Present Advisor: Damon McCoy, Center for Cybersecurity Focus: usable privacy, social media auditing, targeted advertising. **B.A.** Computer Science, B.A. (Hons) Mathematics, Clark University (MA, USA) 2018 - 2022Advisor: Michael Satz Research **Research Associate**, Agricultural Impacts Group @ Clark University Jan-Aug 2022 EXPERIENCE Mentor: Lyndon Estes • Trained, integrated features, and ran inference for deep learning models on AWS. • Refined CNN models to classify crop types and regress on field boundaries. Research Assistant, Human–Computer Interaction @ Brown University May-Sep 2021 Mentors: Jeff Huang, Talie Massachi • Worked on Automotion, a usability test of mobile device interaction. I modified, retrained machine learning models like CNN, Random Forest, SVM to predict user's affect. • Submitted manuscript to IMWUT '21. Our paper reveals insights about using human labelers vs. ML models to predict user emotion from mobile gyroscope data. Research Assistant, Clark University Feb 2020–Jun 2021 Mentor: Shuo Niu • Co-author and maintainer of the lab's Python package • Our papers identified patterns in parasocial relationships and civic engagement on YouTube. TEACHING Teaching Assistant, Clark University Aug 2019–May 2022 EXPERIENCE Lead weekly labs and office hours. Prepare solutions and grade assignments. Computer Science Data Structures, Discrete Structures, Automata Theory Mathematics Discrete Mathematics, Honors Calculus I–II, Multivariate Calculus AWARDS Future Leader PhD Fellowship, New York University 2022-2024 **LEEP Research Fellow**, Clark University 2020 Richard Traina Scholarship, Clark University 2018-2022 TECHNICAL Languages Python, Java, SQL, R, JavaScript, LATEX Tools Docker, Google Cloud Platform, Amazon Web Services Skills Data analysis, Statistical inference, Experiment design, Academic publication VOLUNTEER. Math Tutor, Getting Out Staying Out 2023–Present AND SERVICES Diversity & Inclusion Committee, American Go Association 2020 - 2023

2018-2020

Math Tutor, Massachusetts Correctional Institution

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 2021. [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 Conference on Human Factors in Computing Systems 2021. [pdf].

Posters & Extended Abstracts

- Fall Fest '21 Dinithi Silva-Sassaman, Cat Mai, Jing Qian, and Jeff Huang. Predicting Emotion and Attention from Smartphone Behavioral Data. [pdf]. Fall Fest '21 Clark University.
- CSCW '21 Katherine McKim, **Cat Mai**, Danielle Hess, and Shuo Niu. *Investigating Drug Addiction Discourse on YouTube*. [pdf].
- 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.
- Class report, 2021 Numerical Analysis: Tension Spline Interpolation. [pdf].
- Class report, 2020 Emotional Analysis Via Content Creation on YouTube During COVID-19. [pdf].

SELECTApplied {Application, Network, Web} Security, Quantitative Finance, Cyber LawCOURSEWORKTheoryNumerical Analysis, Quantum Computing, Abstract Algebra, Real Analysis