Cat Mai

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Sep 2018 -Feb 2021

Summer 2019

EDUCATION

Clark University Worcester, MA

B.A. Mathematics, Computer Science 2018–2022

Green River College

Auburn, WA

A.A. Philosophy concentration, High School Diploma 2016–2018

RESEARCH EXPERIENCE

Research Assistant

Clark University

Worcester, MA

Feb 2020 - Current

Advisor: Dr. Shuo Niu

 I work on human-computer interaction projects, focusing on social media analysis. We scrape data from YouTube and perform ground theory analysis, and wrote our own YouTube crawler package.

- Use Python to automate data mining pipeline and visualize data; use JMP to analyze key findings.

Research Assistant

Worcester, MA

Next Generation Science Exemplar at Clark

Advisor: Dr. Sarah Michaels, Dr. Gaowei Chen

I had been working with Dr. Sarah Michaels on improving professional development for K-12 educators who are
working with ESL learners in Biology. I wrote apps in Java and Python to streamline research in classroom
discourse analysis and worked with Dr. Gaowei Chen to improve upon the analysis tool.

Research Assistant Worcester, MA

Advisor: Dr. John Magee, Dr. John Garton

 I used Agisoft Metashape to render 3D models based on photos from Garden of Bomarzo (Italy). During this summer project, we were building prototypes locally and developing proof of concept for the multi-institution conservation project.

My early attempts at creating the photogrammetry of the statues helped Dr. Garton's colleague to secure a
grant and helped Dr. Garton to present the project to grant boards.

Work Experience

Clark University

Teaching Assistant

Clark University

Sep 2019 - Current

- Grade assignments, hold discussion sessions

- Computer science classes: Intro to Computer Science, Data Structures, Automata Theory
- Math classes: (Proof-based) Honors Calculus I & II, Discrete Math

Technician Intern
Worcester, MA
Hamilton Computer Repairs
Nov 2019 -Aug 2020

— I shadowed technicians and learned how to fix laptop hardware. I did diagnostics, part replacement, and refurbishing laptops. Proudest achievement: Learned how to microsolder!

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Papers and Posters

- [1] C. Mai*, T. Chiem*, and A. Hassan*, "Odd One Out": Model Based Biology in an ESL Classroom", presented at the 2019 Clark Academic Fall Fest.
- [2] S. Niu, A. Bartolome*, C. Mai*, and N. B. Ha*, "StayHome WithMe: How Do YouTubers Help with COVID-19 Loneliness?", presented at the 2021 CHI Conference on Human Factors in Computing Systems.

SKILLS

• Proficient: Java, Python, HTML/CSS + JavaScript, Kotlin, LaTeX

• Familiar: C/C++, R

SCHOLARSHIPS AND GRANTS

• Clark University's Richard Traina Scholarship

2018-2022

• Clark University's LEEP Fellowship Research Grant

Summer 2020

VOLUNTEER

• American Go Association

I co-directed the US Open and helped organizing e-Go Congress in 2020 and 2021.

2020-Current

• The Petey Greene Program

I tutored GED Math at a correctional facility.

2018-2020

^{*} indicates equal contribution