Cat Mai

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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 *Worcester, MA*
Clark University *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 *Sep 2018 –Feb 2021*
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*
Clark University *Summer 2019*
Advisor: Dr. John Garton, Dr. John Magee

- 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.

Work Experience

Teaching Assistant *Worcester, MA*
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!

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.

* indicates equal contribution

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

- The Petey Greene Program   *2018–2020*
  I tutored GED Math at a correctional facility.