MATTHEW CLARK

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EDUCATION

Doctor of Philosophy in Computer Science — Expected May 2026
University of Virginia, Charlottesville, VA

Master of Computer Science — August 2023
GPA: 3.973 / 4.0
University of Virginia, Charlottesville, VA

Certification in Cyber Physical Systems — May 2023
University of Virginia, Charlottesville, VA

Bachelor of Arts in Computer Science — May 2021
Magna Cum Laude, Computer Science Departmental Honors
Skidmore College, Saratoga Springs, NY

WORK EXPERIENCE

Graduate Assistant — August 2021 - Present
University of Virginia

- Investigated how to enable personalizing affective messaging for more meaningful communication.
- Designed and ran 4 user studies with a total of 167 participants.
- Cleaned, analyzed, and visualized large amounts of data using statistical analysis (Kruskal-Wallis tests, generalized linear mixed models, etc.) and machine learning models (decision trees, random forests, etc.).
- Presented my research at an international conference to approximately 100 attendees.

Research Assistant — January 2019/2020 - August 2019/2020
Skidmore College

- Aided in analysis, study design, and writing of two papers with my undergraduate professors.
- Annotated the privacy policies of 200 mobile apps and analyzed differences using Chi-Squared tests in Python.
- Developed a pipeline in Java using parallel programming to test the runtimes of SQL queries.

Peer Health Educator — September 2018 - May 2021
Skidmore College

- Organized and ran 20+ events to help promote healthier lifestyles in for college students.
- Promoted and supervised an 8 student committee in the 2020-2021 academic year.

PUBLICATIONS

P. Sadekar, J. Baitinger, S. Conway, **M. Clark**, and A. Doryab, "Personalization in Circadian Rhythm-Based Event Scheduling," The 2023 Systems and Information Engineering Design Symposium (SIEDS), Apr. 2023, doi: 10.1109/SIEDS58326.2023.10137806.

M. Clark and A. Doryab, "Sounds of Health: Using Personalized Sonification Models to Communicate Health Information," Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), vol. 6, no. 4, p. 206:1-206:31, Dec. 2022, doi: 10.1145/3570346.

C. F. Reilly and **M. Clark**, "Moving Recursion Out of the RDBMS for Transactional Graph Workloads," The 11th Annual IEEE Ubiquitous Computing, Electronics Mobile Communication Conference (UEMCON), Oct. 2020, pp. 0371–0376. doi: 10.1109/UEMCON51285.2020.9298122.

A. Prasad, **M. Clark**, H. Nguyen, R. Ruiz, and E. Xiao, "Analyzing Privacy Practices of Existing mHealth Apps," The 13th International Conference on Health Informatics (HEALTHINF), Feb. 2020, pp. 563–570. doi: 10.5220/0009059605630570.

COURSE EXPERIENCE

Graduate:
AI for Social Good; Cloud Computing; Communication, Test-Beds & Policy; Engineering Interactive Technologies; Formal Methods, Safety and Security; Human-Computer Interaction; Human-Robot Interaction; Machine Learning; Signal Processing, Machine Learning and Control

Undergraduate:
Calculus II; Programming Languages; Math Reasoning and Discrete Structures; Algorithms; Graph Theory; Linear Algebra; Introduction to Computer Organization; Computability and Complexity; Artificial Intelligence; Web Development and Data Security; Computer Vision

TEACHING EXPERIENCE

Teaching Assistant August 2023 - Present
University of Virginia
- Computational Behavior Modeling: Managed assignments and aided discussion for 23 graduate students.

Tomorrow's Professor Today Program January 2023 - Present
University of Virginia
- Participated in Tomorrow's Professor Today, a program dedicated to learning pedagogical skills.

Research Mentor August 2022 - Present
University of Virginia
- Advised 7 undergraduate and a high school student on assisting with graduate level research projects.
- Guided a 2023 capstone project consisting of 3 Systems Engineering 4th year students with the design, implementation, analysis, and writing of their capstone project.

SERVICE EXPERIENCE

Computer Science Graduate Student Group Social Chair January 2022 - Present
University of Virginia
- Elected by computer science graduate students for 2 one-year terms.
- Organized and ran upwards of 3 social events a month for graduate students.
- Represented graduate students in meetings with the department.

Outreach Event Volunteer January 2022 - Present
University of Virginia
- Represented UVA's computer science program at 12 graduate, undergraduate, and faculty recruitment events.
- Led technical demos for the UVA Link Lab at 5 recruitment, outreach, and funding events.

Journal Reviewer September 2021 - Present
- Provided reviews of 7 potential publications for IMWUT, CHI, and ACM Health.

AWARDS & HONORS

Link Lab Student Flash Talk Speaker September 2023
University of Virginia

Computer Science Department's John A. Stankovic Research Award Nomination April 2023
University of Virginia

Link Lab Outstanding Graduate Student Research Award Nomination April 2023
University of Virginia

National Science Foundation National Research Traineeship August 2021
University of Virginia

Robert and Marcia DeSieno Prize for Excellence in Computer Science May 2021
Skidmore College