Anael Kuperwajs Cohen

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Education

Macalester College - Saint Paul, MN   2017 – 2021
B.A. in Computer Science, Applied Mathematics and Statistics
Concentration in Cognitive Science
Honors in Computer Science, Summa Cum Laude

Relevant Experience

Clinical Research Coordinator   March 2024 - present
Department of Pediatric Nephrology, University of Minnesota   Minneapolis, MN

- Contribute to pediatric nephrology research by coordinating all study components, including participant recruitment, enrollment, study visits, data and specimens, and sponsor communication.
- Build relationships with patients throughout study participation as a reliable point of contact to ensure retention and ease feelings of apprehension.
- Collaborate with healthcare professionals to maintain high standard of clinical care while advancing clinical research.
- Manage all regulatory activities and ensure local and external guidelines are met.
- Received expedited promotion due to adaptability and quality of work. Added responsibility of training colleagues on research procedures and expectations.

Technical and Data Study Coordinator   Aug 2022 - Jan 2024
Cognition, Aging, and Technology Lab, University of Minnesota and Minneapolis   Minneapolis, MN
VA Health Care System

- Research on detecting early cognitive decline in older adults using unobtrusive technology to monitor changes in daily living and activities.
- Maintained the consistent functioning of technology used in the study, including quickly problem-solving and adapting to different environments while fixing technical issues on-site at participants' homes and keeping organized notes on the status of study devices.
- Effectively communicated with the older population in the study, some with mild cognitive impairment, regarding integrating technology usage into their daily lives and navigated the difficulties this disease can cause for the study participants.
- Supervised the proper handling, organization, de-identification, and sharing of data as the main facilitator of inquiries both within and outside the lab.

Postgraduate Research Fellowship   July 2021 - June 2022
Edward Zigler Center in Child Development and Social Policy, Yale University   New Haven, CT

- Research on the role of early childhood mental health consultation for childcare providers on promoting positive social and emotional learning for infants and toddlers. Became certified in the consultation intervention that was provided to childcare providers (IT-CHILD).
- Communicated directly with childcare providers in the study regarding all parts of the study process and assisted with any questions or difficulties while maintaining the priority of supporting children and their caretakers.
- Shadowed at a local pre-school to observe how children behave and further understand the application of positive learning interventions.
- Performed statistical analysis on how childcare providers' mental health was affected by the COVID-19 pandemic.

Computer Science Education Research Assistant   June 2020 - June 2021
Code and Cognition Lab, University of Washington   Seattle, WA

- Studied factors that influence the social help-seeking behavior of introductory programming students in a competitive environment.

- Led the entire study from start-up to close-out and directed all components, including conception, regulatory, recruitment, data collection, analysis, and presentation of results.
- Conducted semi-structured interviews and performed thematic analysis and qualitative coding on the ensuing transcripts.
- Research extended into an undergraduate honors thesis and a first-author peer-reviewed publication.

Interdisciplinary Software Engineering Research Assistant — Summer 2019
Institute for Software Research, Carnegie Mellon University — Pittsburgh, PA

- Implemented a tutoring program directed towards introductory programmers for the lab's platform, Penrose, that turned simple mathematical notation into diagrams by utilizing the visualizations for math education.
- Studied effective tutorial designs for programming languages.
- Practiced programming effective UI designs.

Virtual Reality Research Assistant — Summer 2018
Macalester College — Saint Paul, MN

- Virtual reality programming focused on the execution and evaluation of 3D region-of-interest selection techniques.
- Managed the collaboration of editing code on the same project with a team of researchers.
- Completed a detailed literature review to understand the scope of techniques already discovered and brainstormed different ways to create a similar, desired outcome through our own programming.
- Clare Boothe Luce (women in computer science) grant recipient.

Publications

Kuperwajs Cohen, A., Oleson, A., & Ko, A. (2024). Factors Influencing the Social Help-Seeking Behavior of Introductory Programming Students in a Competitive University Environment. *ACM Transactions on Computing Education* 24, 1, Article 11. ↗

De Vito, A.N., Ju, C.H., Lee, S.Y., **Kuperwajs Cohen, A.**, Trofimova, A.D., Liu, Y., Eichten, A., Hughes, A. (2024) Cognitive dispersion is related to subtle objective daily functioning changes in older adults with and without cognitive impairment. *Alzheimer's & Dementia: Diagnosis, Assessment, and Disease Monitoring.* ↗

Patel, K., Shafiq, M., Malik, A., Cobanoglu, A., Klotz, M., Humphries, J., Lee, A., Murray, T., Wilkinson, D., Yildirim, I., Elharake, J., Diaz, R., Rojas, R., **Kuperwajs Cohen, A.**, Omer, S., Gilliam, W. (2022). Relationship Between the Use of Nonpharmaceutical Interventions and COVID-19 Vaccination Among U.S. Child Care Providers: A Prospective Cohort Study. *Vaccine.* ↗

Elharake, J., Shafiq, M., Cobanoglu, A., Malik, A., Klotz, M., Humphries, J., Murray, T., Patel, K., Wilkinson, D., Yildirim, I., Diaz, R., Rojas, R., **Kuperwajs Cohen, A.**, Lee, A., Reyes, C., Omer, S., Gilliam, W. (2022). Prevalence of Chronic Diseases, Depression, and Stress among U.S. Child Care Professionals during the COVID-19 Pandemic. *MedRxiv.* ↗

Jackson, B., Beckham, K., **Kuperwajs Cohen, A.**, Heggeseth, B. (2019). Comparing Convex Region-of-Interest Selection Techniques for Surface Geometry. *ACM Symposium on Virtual Reality Software and Technology.* ↗

Kuperwajs Cohen, A., Ni, W., & Sunshine, J. (2019). Designing Declarative Language Tutorials: a Guided and Individualized Approach. OASIcs, Vol. 76, *PLATEAU.* ↗

Talks

Factors Influencing the Social Help-Seeking Behavior of Introductory Programming Students, Macalester College	April 2021
Designing Declarative Language Tutorials: a Guided and Individualized Approach, PLATEAU Workshop	October 2019

Teaching

Teaching Assistant 2018-2021
Macalester College

- COMP 124: Object-Oriented Programming and Data Structures
- STAT 253: Statistical Machine Learning
- STAT 155: Introduction to Statistical Modeling
- COMP/MATH 361: Theory of Computation

Honors, Awards, and Recognition

Macalester College Camp Endowed Prize in Computer Science	2021
Macalester College Phi Beta Kappa - Epsilon of MN	2021
Macalester College Outstanding Achievement in First-Year Chemistry	2018
Macalester College Dean's List	2017-2021
Macalester College DeWitt Wallace Distinguished Scholar	2017-2021
Woodinville High School Valedictorian	2017
PSAT National Hispanic Recognition Award	2016
AP Scholar with Distinction	2016

Service and Outreach

University of Minnesota Cultural Humility Training	2024
Macalester College Department of Mathematics, Statistics, and Computer Science Office Assistant	2020-2021
Macalester College Department of Multicultural Life Social Media Representative	2020-2021
Founder and Chair, Macalester College Naming Hate Workshop Series	2018-2021
Founder and Chair, Macalester College LatinX Hip Hop Dance Group 13th Street	2018-2021

Technical Skills and Competencies

Software: RStudio, REDCap, Qualtrics, SPSS, Microsoft Office, BOX, Git

Programming: R, Python, HTML, Java
[Example code ↗]

Medical: Red Cross Basic Life Support Certified, Vital Signs, EKG, Specimen Lab Work