Mike Merrill

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EDUCATION

University of Washington, Seattle, Washington   *Expected 2025*
Paul G. Allen School of Computer Science and Engineering
PhD Student – Advised by Tim Althoff

- Recipient of the "Corin Anderson Endowed Fellowship in Computer Science and Engineering"

Cornell University, Ithaca, New York   *May 2017*
College of Agriculture and Life Sciences
Bachelor of Science in Information Science

- Magna Cum Laude
- Winner of the department's "Excellence in Research" award

RESEARCH

Interests: Data science, ubiquitous computing, human behavior

HealthRhythms | New York, New York | *Data Scientist*   *September 2016 – June 2019*

- Developed novel algorithms for the measurement of deviation from behavioral routines
- Pioneered a state-of-the-art propriety method for the prediction of sleep onset and waketime from smartphone data
- Advised the development, deployment, and management of a dozen clinical mobile sensing studies
  for academic and pharmaceutical clients
- Acted as the company's sole data scientist and backend developer for six months
- Represented the company at conferences, sales meetings, and venture capital pitches

People Aware Computing Lab | Cornell University | Advised by Tanzeem Choudhury   *June 2015 – May 2017*

- Co-authored three research papers on applied machine learning and psychiatry for leading journals and conferences
- Applied Android's mobile sensing API to discover previously unknown insights into
  the private social behaviors of schizophrenics through cellphone metadata
- Leveraged DBSCAN and COP-KMeans clustering to analyze patterns in GPS mobility traces
- Managed local enrollment for MyCampusLife: a collaboration between Carnegie Mellon, Cornell,
  Dartmouth, and Georgia Tech to monitor the mental health and productivity of students

Ubiquitous Computing Lab | Carnegie Mellon University | Advised by Anind Dey   *June 2016 – August 2017*

- Began an ongoing longitudinal research project to assess the formation of social cohorts through cellphone data
- Developed a SQL-based framework using Python's pandas for analyzing the digital behavior of college students, with
  the goal of predicting and monitoring depression, stress, and underperformance on campus

PUBLICATIONS AND POSTERS

- D. Ben-Zeev, et al., Michael Merrill. "CrossCheck: Integrating mobile self-report, behavioral sensing, and smartphone use to identify digital indicators of psychotic relapse." *Psychiatric rehabilitation journal.* 2017;40(3):266-275.
- R. Wang, et al., Michael Merrill. "CrossCheck: Toward passive sensing and detection of mental health challenges in people with schizophrenia". Paper presented at Ubicomp 2016, Heidelberg, Germany on September 14, 2016.
- V. Tseng, et al., Michael Merrill. "Assessing mental health issues on college campuses: preliminary findings from a pilot study." Paper presented at Ubicomp Workshop 2016, Heidelberg, Germany on September 12, 2016.
- E. Frank, Michael Merrill, et al. "Sensing Depression: Using Smartphone Sensors to Predict Changes in Depression Severity". Poster presented at The 56th Annual Meeting of the American College of Neuropsychopharmacology, Palm Springs, California on December 4, 2017.
- E. Frank, et al., Michael Merrill. "Continuous Behavioral Data as a Potential Depression Biomarker". Poster presented at The 55th Annual Meeting of the American College of Neuropsychopharmacology, Hollywood, Florida on December 6, 2016.