

PROMOTION RECOMMENDATION
THE UNIVERSITY OF MICHIGAN
SCHOOL OF INFORMATION

Tawanna R. Dillahunt, assistant professor of information, School of Information, and assistant professor of electrical engineering and computer science, College of Engineering, is recommended for promotion to associate professor of information, with tenure, School of Information, and associate professor of electrical engineering and computer science, without tenure, College of Engineering

Academic Degrees:

Ph.D.	2012	Carnegie Mellon University, Pittsburgh, PA
M.S.	2011	Carnegie Mellon University, Pittsburgh, PA
M.S.	2005	Oregon Health and Science University, Portland, OR
B.S.	2000	North Carolina State University, Raleigh, NC

Professional Record:

2014 – present	Assistant Professor of Information, School of Information, University of Michigan
2014 – present	Assistant Professor of Electrical Engineering and Computer Science, College of Engineering
2014	Visiting Professor, School of Information, University of Michigan
2013 – 2014	President’s Post-doctoral Fellow, School of Information, University of Michigan
2011 – 2013	Chief Technology Officer, Product Lead, Product Developer, EEme, Pittsburgh, PA
2007 – 2012	Graduate Researcher, Carnegie Mellon University
2010	Research Intern, IBM TJ Watson Research, Social Computing Group, Hawthorne, NY
2006 – 2007	Network Software Engineer, Intel Corporation, LAN Access Division, Hillsboro, OR
2000 – 2006	Software Engineer, Software Validation Lead, Intel Corporation, Desktop Boards Division, Hillsboro, OR

Summary of Evaluation:

Teaching: Professor Dillahunt is a thoughtful, diligent, reflective, and effective educator. She encourages, nurtures, and supports her students, enabling them to create innovative, socially responsible, and inclusive technologies that solve real-world problems. She puts new research findings, including her own, into practice by employing an experiential learning approach in the classroom. She makes use of mid-and end-of-year teaching evaluations, as well as taking advantage of CRLT resources, and consults with colleagues and staff on teaching methods. Her approach has led to consistently high course evaluations. She has taught four different courses at the School of Information: Introduction to Interaction Design, Pervasive Interaction Design, User Experience Research and Design, and Research Methods for Special Populations.

In the area of research mentoring, Professor Dillahunt has supervised 44 people at the post-doctoral, Ph.D., Master’s, undergraduate, and high school levels. Twenty of those students have been women, and 11 have been underrepresented minorities. Notably, of her 30 peer-reviewed publications, 23 have

been with student co-authors. Professor Dillahunt has supervised (either advising or co-advising) three Ph.D. students, the most senior of which is in the 5th year of the program.

Research: Professor Dillahunt is a researcher primarily in the fields of human-computer interaction, computer-supported cooperative work, and social computing, and to a lesser extent, information and communication technologies for development. Professor Dillahunt's greatest scholarly impact is based in her research regarding how lower-income U.S. residents can (or cannot) benefit from the sharing economy — the fast-rising sector exemplified by Uber, Lyft, and AirBnb, in which individual producers of goods or services (e.g., drivers, guest room owners) are matched to consumers via online platforms. Her findings demonstrate how platforms might be redesigned to meet the needs of underrepresented groups, resulting in both impactful technology designs and new theory about human interaction with such systems. Taken as a whole, Professor Dillahunt's body of work is prominent and influential in her scholarly fields.

Professor Dillahunt's research found that contrary to the public "hype" about the sharing economy, lower-income individuals face notable barriers to benefiting from these platforms, either as consumers or producers. For example, her 2017 paper from the Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI), "Uncovering the values and constraints of real-time ridesharing for low-resource populations" showed that low-resource consumers often have no digitally transactable currency partly because they distrust the institutions that provide them. Her 2015 paper, "The Promise of the Sharing Economy among Disadvantaged Communities" also from the CHI Proceedings, demonstrated that producers frequently lacked the material (e.g., a car, a guest room) and social requirements (e.g., a sense of personal safety in their communities) for engagement. To address these issues, Professor Dillahunt has conducted a broad range of innovative participatory studies and related interventions to identify solutions to alleviate these challenges. Lower-income participants have been offered free vouchers for Uber, access to experienced mentors for job searches, opportunities through community organizations, and training to apply as AirBnb Experience providers. Her findings indicate that some of the interventions have lowered engagement barriers.

Professor Dillahunt published two papers as a President's Post-doctoral Fellow at the School of Information (one as first author; another winning honorable mention at the ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp)). Since becoming an assistant professor, she has published 26 peer-reviewed papers of which 12 were first-authored by her, seven of which had her doctoral or post-doctoral advisees as first authors, and three of which were first-authored with doctoral students primarily advised by her collaborators. All of the papers are in the top publication outlets of their respective fields. Several of these have won awards: one Conference on Human Factors in Computing Systems (CHI) Best Paper Award (awarded to less than 1% of submitted papers); and Honorable Mentions in the CHI, UbiComp, and ACM Designing Interactive Systems conferences.

According to Google Citations as of January 3, 2020, Professor Dillahunt's research has been cited 2008 times, with an h-index of 19 and an i10-index of 32. This suggests that Professor Dillahunt's research influence is already within range of tenured associate faculty in her area. She has also received over \$3 million dollars in grant funding, with over \$800,000 as the principal investigator from the National Science Foundation and the Athabasca/Gates Foundation. Of this, over \$1 million is from a variety of units internal to the University of Michigan, such as the Michigan Institute for Data Science.

Recent and Significant Publications:

- Dillahunt, T.R. and Veinot, T.C. (2018). Getting There: Barriers and Facilitators to Transportation Access in Underserved Communities. In *ACM Transactions on Computer-Human Interaction (TOCHI)*, 25(5), 1-39.
- Dillahunt, T.R., Lu, A. (2019). DreamGigs: Designing a Tool to Empower Low-Resource Job Seekers. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (CHI '19)*. ACM, New York, NY, USA.
- Dillahunt, T.R., Lam, J., Lu, A., Wheeler, E. (2018). Designing Future Employment Applications for Underserved Job Seekers: A Speed Dating Study. In *Proceedings of Designing Interactive Systems (DIS '18)*. ACM, New York, NY, USA. (Best Paper Award, honorable mention)
- Dillahunt, T.R., Kameswaran, V., Li, L., Rosenblat, T. (2017). Uncovering the Values and Constraints of Real-time Ridesharing for Low-resourced Populations. In *Proceedings of the ACM 34th international conference on Human factors in Computing Systems (CHI '17)*. ACM, New York, NY, USA.
- Dillahunt, T., and Malone, A.R. (2015). The Promise of the Sharing Economy among Disadvantaged Communities. In *Proceedings of the ACM 32nd international conference on Human factors in computing systems (CHI '15)*.

Service: Professor Dillahunt has performed service at the School of Information, in her academic communities, and externally in community engagement. At the School of Information, Professor Dillahunt served on three faculty search committees, was on the Doctoral Committee for two years and was active in assisting with program shifts such as the new funding model for the doctoral program. She also ran the Michigan Interactive and Social Computing group which requires coordination of weekly meetings during the school year.

At the University of Michigan level, Professor Dillahunt has demonstrated commitment to supporting underrepresented people and communities. She is a Digital Inclusion Policy fellow mentor for UM Poverty Solutions and is a member of the Advisory Committee for the University of Michigan Center for Academic Innovation. She has also participated in the Movement of Underrepresented Sisters in Engineering and Sciences group.

In terms of service to her disciplines, Professor Dillahunt was a subcommittee chair at the 2019 and 2020 CHI conferences. This is a high-level role that is often taken up post-tenure. She has been on 14 program committees, which is more than is typical for pre-tenure faculty. She reviews 15-20 papers per year in her disciplines which meets expectations for conference communities. She has served on three NSF grant review panels, as well as on the Human-Computer Interaction Consortium and the iSchool Doctoral Dissertation Award committees.

Professor Dillahunt's service also extends to the communities that she studies, including the Eastside Community Network, FocusHOPE, the Guidance Center, and MichiganWorks! As part of this, she was on an Advisory Committee for a project related to Energy use among Hispanic households and currently services on MichiganWorks! Job Seeker Services Committee.

External Reviewers:

Reviewer A: “[Professor] Dillahunt does full end-to-end design research from ideation to evaluation, engages with and develops theory, and does extraordinary and impactful work in collaboration with the communities she studies. In addition to her excellent publications and sharp and well implemented

research agenda, she has also been very successful in fundraising. [Professor] Dillahunt would almost certainly receive tenure in my department...”

Reviewer B: “I am writing this letter in strong support of [Professor] Dillahunt’s case for promotion to Associate Professor with tenure. She has an outstanding research record and is already seen as a leader in her area of scholarship, with a great trajectory ahead of her.”

Reviewer C: “...[Professor Dillahunt’s] materials show significant evidence of impactful HCI research that has positively benefitted society. Her service to the School of Information, the university, and the research community is on par with that of an Associate Professor. I recommend her without hesitation for promotion to this position.”

Reviewer D: “[Professor] Dillahunt’s work is courageous. Where others might leap to quick technical ‘fixes,’ she identifies barriers—often social (e.g., trust) and infrastructural (e.g., transport)—which require complex, multistakeholder, multi-layer, multi-disciplinary solutions to make sustained progress. [Professor] Dillahunt does not back away from these challenges, rather she engages them head-on with honesty and integrity. From a ‘solutions’ perspective, this may be slower work but, ultimately, it is more likely to be long-lasting, successful work. Work to admire.”

Reviewer E: “I believe the quality of [Professor] Dillahunt’s scholarship far exceeds the expectations appropriate for tenure, as she has done one of the toughest parts of the job: managed to produce stellar scholarship, while strengthening her chops as a teacher and publicly-engaged scholar representing the discipline and beyond. She will certainly only become an increasingly well-cited interlocutor in several fields. It is, therefore, my great pleasure to recommend her case for promotion with tenure.”

Reviewer F: “[Professor] Dillahunt is more than well-deserving of tenure at the University of Michigan. She had built a reputation and impact in her field, and over the recent years had an increasing role in charting its direction. I enthusiastically support her tenure and promotion. I cannot wait to see what work she will be able to perform as a tenured member of the University of Michigan.”

Reviewer G: “Professor Dillahunt is a courageous scholar, tackling issues of poverty and inequality with creative, sophisticated methodologies and approaches. She sees things through to the design and build stages (unlike a lot of work that merely critiques). Professor Dillahunt deploys a thoughtful palette of methods including participatory design, interviews, and workshops to generate rich, contextualized data that inform her designs. She uses lengthy, in-depth methods of iterative design to improve the systems she builds. Professor Dillahunt situates her work within careful regional and/or sociopolitical analysis, emphasizing pertinent social and economic patterns.”

Reviewer H: “I view [Professor] Dillahunt as one of the field’s bright [junior] researchers who I believe will help shape the field in the coming years. If [Professor] Dillahunt was applying for tenure in my school, based on her record and impact, I have no doubt that she would meet all the requirements for promotion and tenure. She has demonstrated the ability to conduct cutting-edge research, publish in high-quality venues, and [advise] graduate students. I also believe that [Professor] Dillahunt has developed national recognition for her research. Consequently, I have no reservations in recommending [Professor] Dillahunt for promotion to Associate Professor with tenure.”

Reviewer I: “Professor Dillahunt’s primary contribution to the field of HCI is in analyzing and rethinking settled conclusions about how technologies work and should be designed, by better understanding the needs, practices, and perspectives of members of socioeconomically marginalized communities in the US. This work is crucial to our field because both technology designers and HCI

researchers tend to come from more socioeconomically advantaged communities and themselves earn steady incomes for their work.”

Reviewer J: “[Professor] Dillahunt’s record meets-and exceeds-the requirements for tenure in my department. I strongly recommend her for tenure at UMSI, based on the novelty and quality of her research. [Professor Dillahunt] is a well-regarded and admired scholar; she is an asset to UMSI and to the broader HCI research community.”

Summary of Recommendation:

Professor Dillahunt’s accomplishments in the areas of teaching, research, and service meet and exceed promotion and tenure requirements. Therefore, with the support of the Promotion and Tenure Committee of the School of Information and the Executive Committee in the College of Engineering, we enthusiastically recommend Tawanna R. Dillahunt for promotion to associate professor of information, with tenure, School of Information, and associate professor of electrical engineering and computer science, without tenure, College of Engineering.



Thomas A. Finholt
Dean, School of Information



Alec D. Gallimore, Ph.D.
Robert J. Vlastic Dean of Engineering
College of Engineering

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