Earnest Wheeler

Ph.D. Student, University of Michigan, School of Information

105 S. State, Ann Arbor, MI 48104

+1 (415) 317-5436 — earnestw@umich.edu

Research Interests

HCI, Economic Mobility, Digital Inequality, Information Search, Mentorship, ICT4D

Education

Ph.D. Information Science *Fall 2016 - Present*
University of Michigan, Ann Arbor, MI

B.A. (Honors) Mathematics, Computer Science *2012 - 2016*
Grinnell College, Grinnell, IA

Professional Experience

Graduate Student Research Assistant, *University of Michigan* *Fall 2016 - Present*
My work centers on social computing for issues of digital inequality in employment and pathways to economic mobility. I am advised by Dr. Tawanna Dillahunt.

Graduate Student Instructor, *University of Michigan* *Fall 2017*
I assisted Dr. Tawanna Dillahunt in teaching SI 582: Introduction to Interaction Design, running in-class presentations and activities and providing regular feedback to 37 students as they each applied user-centered design principles to ultimately develop a hi-fi digital prototype.

Programmer Analyst, *University of Michigan* *Summer 2016*
I was a web designer, web developer, and webmaster for Dr. Kentaro Toyama. My duties included conducting competitive analyses, full stack web development, and database design.

Software Engineering Intern, *Arista Networks* *Summer 2015*
I was the full stack web developer for an internal workflow management tool. I shipped various UI improvements and integrated multi-threading into the system backend to improve the site's load-time and overall responsiveness.

Teaching Assistant, *Grinnell College* *Spring 2014*
I helped Dr. Samuel Rebelsky teach CS 207: Algorithms and Object-Oriented Design. I ran three lab sessions each week, and acted as a substitute lecturer when Dr. Rebelsky was out of town.

Publications

T.R. Dillahunt, J. Lam, A. Lu, and **E. Wheeler**. 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. **honorable mention** [Acceptance rate: 23%]

E. Wheeler and T.R. Dillahunt. 2018. Navigating the Job Search as a Low-Resourced Job Seeker. In *Proceedings of the 2018 ACM CHI Conference on Human Factors in Computing Systems.* [Acceptance rate: 25.7%]

T.R. Dillahunt, *X. Wang, ***E. Wheeler**, H.F. Cheng, B. Hecht, and H. Zhu. 2017. The Sharing Economy in Computing: A Systematic Literature Review. In *Proceedings of the ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW) Online First.* [Acceptance rate: 27.3%] *=authors contributed equally.

E. Wheeler, T. R. Dillahunt, and S. Y. Rieh. 2017. Opportunities to Address Information Poverty with Social Search. In *Proceedings of the CHI 2017 Conference Extended Abstracts on Human Factors in Computing Systems.*

E. Fordham, H. Freger, A. Hinchman-Dominguez, A. Mitchell, D. Rebelsky, V. Tsou, **E. Wheeler**, Z. Wolter, and S. A. Rebelsky. 2015. MIST, The Mathematical Image Synthesis Toolkit In *Proceedings of the 46th ACM Technical Symposium on Computer Science Education.*

Current Research Projects

Designing the Next Generation of Employment Tools
Advisor: Dr. Tawanna R. Dillahunt (University of Michigan) *Fall 2016 - Present*
The goal of this research project is to understand the requirements for and to begin building next-generation tools and applications that support the distinct needs of underserved U.S. job seekers. My work on the project began in Fall 2016 with an exploratory study of the information seeking behavior of low-income and low-education job seekers in Detroit, with an emphasis on the ways they use online resources to address their needs. Starting in Fall 2017, I have been designing studies to test design concepts and recommendations drawn from past research.

Evaluation of a Mentoring Program to Support Economic Mobility
Advisor: Dr. Tawanna R. Dillahunt (University of Michigan) *Fall 2017 - Present*
The goal of this project is to support Eastside Community Network (ECN), an established community partner of Dr. Dillahunt and myself, in evaluating a pilot intervention that aims to bolster economic self-sufficiency in low-income communities in Detroit. The expected outcomes of this project are a rigorous evaluation of the impact of this program, as well as design recommendations for existing and future communication and collaboration tools to support formal mentoring relationships and relationship development.

Grants

Co-PI (with Tawanna Dillahunt) *2018*
University of Michigan Poverty Solutions, *Supporting Economic Mobility through Community Mentorship*
Total Amount: $30,000

Service

Conference Organizer

- *Paper Program Chair*, ACM CHI 2019
- *Data Chair*, ACM CHI 2018
- *PCS Liason*, ACM CHI 2017

Reviewer

- ACM CHI 2018
- ACM CSCW 2018 Online First
- ACM DIS 2018

Student Volunteer

- ACM ICTD 2016
- ACM SIGCSE 2015

Volunteer/Big Brother

- Big Brothers, Big Sisters (Fall 2016 - Present)

References (Upon Request)

Dr. Tawanna Dillahunt - Assistant Professor of Information Science
School of Information, University of Michigan

Dr. Kentaro Toyama - W.K. Kellogg Professor of Community Information
School of Information, University of Michigan

Dr. Samuel A. Rebelsky - Professor of Computer Science
Department of Computer Science, Grinnell College