

Cole Gleason

Ph.D. Student at CMU Human-Computer Interaction Institute
826 N Euclid Ave, Pittsburgh PA 15206

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cgleason@cs.cmu.edu
colegleason.com

Education

- **Carnegie Mellon University** Pittsburgh, PA
Ph.D., Human-computer Interaction August 2015 - Present
 - Creating blind assistive tech with computer vision and crowdsourcing.
 - Advised by Jeffrey Bigham and Kris Kitani as part of the CMU Accessibility Lab
 - Relevant Coursework: Applied Research Methods, Computer Vision, Cognitive Perspective in HCI, Machine Learning
- **University of Illinois** Urbana-Champaign, IL
B.S, Computer Science August 2011 - May 2015
 - Advised by Karrie Karahalios as part of the Social Spaces Group
 - Chair of the largest Association for Computing Machinery student chapter in the U.S.
 - Chair of 2013 Reflections | Projections technology conference.
 - Relevant Coursework: Mobile Augmented Reality, Virtual Reality, Machine Learning for Signal Processing, Cognitive Science

Industry Experience

- **Microsoft Research** Redmond, WA
Research Intern May 2017 - August 2017
 - Developed tool as part of the Microsoft Cities Unlocked project to help people with vision impairments explore the physical world.
 - Conducted user studies with blind participants and submitted a paper on the project to CHI 2018.
- **Facebook Inc.** Menlo Park, CA
Software Engineering Intern June 2015 - August 2015
 - Created and deployed user controls for the On This Day product.
 - Experimented with object recognition in photos to improve ranking.
- **CoreOS Inc.** San Francisco, CA
Software Engineering Intern May 2014 - January 2015
 - Maintained OS update service APIs and associated CLI tool.
 - Developed and maintained tool for setup of new hosted customers.
- **Hulu LLC** Seattle, WA
Software Engineering Intern May 2013 - August 2013
 - Primary architect and developer of a new *Node.js* proxy for testing infrastructure.
 - Maintained and improved video metadata service and cache layer.
 - Member of design team for an internal software deployment tool.
- **Facebook Inc.** Menlo Park, CA
Software Engineering Intern May 2012 - August 2012
 - Developed new premium features (*Promote your Post*) for desktop and mobile users with the Facebook Payments team.

Peer-Reviewed Publications

- Dragan Ahmetovic, Masayuki Murata, **Cole Gleason**, Erin Brady, Hironobu Takagi, Kris Kitani, and Chieko Asakawa. 2017. Achieving Practical and Accurate Indoor Navigation for People with Visual Impairments. *Web for All 2017*. **Best Paper**
- Dragan Ahmetovic, **Cole Gleason**, Chengxiong Ruan, Kris Kitani, Hironobu Takagi, and Chieko Asakawa. 2016. NavCog: a navigational cognitive assistant for the blind. *MobileHCI 2016*.

Posters, Demos, and Other Publications

- **Cole Gleason**, Dragan Ahmetovic, Carlos Toxtli, Saiph Savage, Jeffrey P. Bigham, and Chieko Asakawa. 2017. LuzDeploy: A Collective Action System for Installing Navigation Infrastructure for Blind People. *W4A 2017*
- **Cole Gleason**, Anhong Guo, Gierad Laput, Kris Kitani, and Jeffrey P. Bigham. 2016. VizMap: Accessible Visual Information Through Crowdsourced Map Reconstruction. *ASSETS 2016*
- Jeffrey P. Bigham, Erin L. Brady, **Cole Gleason**, Anhong Guo, and David A. Shamma. 2016. An Uninteresting Tour Through Why Our Research Papers Aren't Accessible. *alt.chi 2016*
- Dragan Ahmetovic, **Cole Gleason**, Kris M. Kitani, Hironobu Takagi, and Chieko Asakawa. 2016. NavCog: turn-by-turn smartphone navigation assistant for people with visual impairments or blindness. *W4A 2016*

Patents

- Yigal Dan Rubinstein, Abhishek Doshi, Reshma Khilnani Ebberson, and **Cole Gleason**. 2014. Associating an indication of user emotional reaction with content items presented by a social networking system. U.S. Patent 8,918,339, filed March 15, 2013 and issued December 23, 2014.

Teaching Experience

- **User-Centered Research & Evaluation** Pittsburgh, PA
Teaching Assistant *August 2016 - Present*
 - Lead discussion sections on using user-oriented research methods.
 - Assist and grade students on team-focused projects.

Invited Talks

- **ACM@UIC Flourish Conference** Chicago, IL
Blockchain as a Backbone *April 2014*

- Delivered a talk on the importance of the technology underlying Bitcoin in distributed trustless peer-to-peer systems.

Awards & Honors

NSF Graduate Research Fellowship Program - Fellow	2017
NSF Graduate Research Fellowship Program - Honorable Mention	2016
The Paciello Group - Web Accessibility Challenge Delegates' Award	2016
IBM - Web for All People with Disabilities Award	2016
Daniel L. Slotnick Scholarship	2014

Technical Skills

Programming Languages: Python, Go, Javascript/Node.js, PHP/Hack, C, C++, OCaml, Ruby, Java

Frameworks & Platforms: Amazon Web Services, Google Compute Engine, CoreOS, Docker