

DARREN GUINNESS

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residence Boulder, CO *phone* (330) 577-3766

ABOUT

Ph.D. student using development to study and shape future interaction. Interested in new interaction techniques and systems with a focus on accessibility.

EDUCATION

*Doctorate in
Computer Science*

2015–Present · University of Colorado Boulder

Area: Human-Centered Computing

ADVISED BY: Shaun Kane

MEMBER OF: Superhuman Computing Lab

MEMBER OF: Interactive Robotics and Novel Technologies Lab

*Masters of
Computer Science*

2013–2015 · Baylor University

Area: Human-Computer Interaction

*Bachelor of
Computer Science*

2009–2013 · Bowling Green State University

SELECTED PUBLICATIONS

- [1] Darren Guinness, Edward Cutrell, and Meredith Ringel Morris. Caption crawler: Enabling reusable alternative text descriptions using reverse image search. In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*. ACM, 2018.
 - [2] Darren Guinness, Daniel Szafir, and Shaun K Kane. Gui robots: Using off-the-shelf robots as tangible input and output devices for unmodified gui applications. In *Proceedings of the 2017 Conference on Designing Interactive Systems*, pages 767–778. ACM, 2017.
 - [3] Darren Guinness, Alvin Jude, G Michael Poor, and Ashley Dover. Models for rested touchless gestural interaction. In *Proceedings of the 3rd ACM Symposium on Spatial User Interaction*, pages 34–43. ACM, 2015.
 - [4] Darren Guinness, G Michael Poor, and Alvin Jude. Gestures with speech for hand-impaired persons. In *Proceedings of the 16th international ACM SIGACCESS conference on Computers & accessibility*, pages 259–260. ACM, 2014.
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RESEARCH RELATED COURSEWORK

User-Centered Development · Inclusive Design and Assistive Technology · Graphics

Human-Robot Interaction · Swarm Intelligence · Robot Perception/Planning/Control

Distributed Databases · Information Retrieval · Machine Learning

SERVICE

Program Committee Member

- AC Late Breaking Work - ACM CHI 2018

Reviewer

- International Journal of Human-Computer Studies 2016-2017
- ACM TEI 2017
- ACM CHI 2017
- ACM UIST 2017
- ACM/IEEE HRI 2017-2018

Student Volunteer

- ACM CHI 2016-2017
- ASSETS 2017

TECHNICAL SKILLS

<i>Basic</i>	R · HTML5 · C# · CSS3 · SQL · Android · Azure Cloud Services
<i>Intermediate</i>	MATLAB · Git · C · Technical Writing · JQuery · OpenGL · Node.js
<i>Advanced</i>	C++ · Java · PHP · L ^A T _E X · *Nix · Interaction Design

NON-TECHNICAL SKILLS

<i>Communication</i>	Conference and hackathon presentations, Baylor Three-Minute Thesis Contest (Honorable Mention)
<i>Leadership</i>	Graduate Student Rep (CS), trained juniors in multiple roles

RESEARCH EXPERIENCE

<i>Microsoft Research</i>	<i>Summer 2017</i> · Research Intern Worked under two mentors at Microsoft during a summer internship. Created a cloud service and browser extension to automatically caption images during a browsing session. The system used reverse image search and a web crawler to supply human-authored captions which can be spoken by the screen reader while browsing. This work was awarded an Honourable Mention for Best Paper at CHI 2018.
<i>University of Colorado Boulder</i>	<i>2015–Present</i> · Research Assistant Joined the new Superhuman Computing Lab at the University of Colorado. Worked under Dr. Shaun Kane on projects related to Accessibility, Human-Robotic Interaction, and Haptics.
<i>Baylor University</i>	<i>2013–2015</i> · Research Assistant Helped start a new Human-Computer Interaction lab at Baylor University. Worked in a small team to construct and analyze gestural interfaces for research purposes. The work focused on reducing the effects of fatigue in gestural interaction. Generated novel project ideas and conducted studies in order to improve gestural interaction. Oversaw undergraduate and graduate students in the lab.
