

## AUSTIN TOOMBS

(765) 620-9825 | toombsa@purdue.edu | austintoombs.com

### Education

- May 2016 **Indiana University—Bloomington, IN**  
Ph.D. Informatics, Human Computer Interaction Design  
Minor: Inquiry Methodology  
Dissertation: *Care and the Construction of Hacker Identities, Communities, and Society*  
Co-chairs: Jeffrey Bardzell and Shaowen Bardzell
- May 2012 **Indiana University—Bloomington, IN**  
M.S. Human Computer Interaction Design
- May 2010 **Ball State University—Muncie, IN**  
B.S. Computer Science  
Minor: Mathematics

### Professional and Teaching Experience

- 2017—Present **Assistant Professor, Purdue University**  
Department of Computer Graphics Technology, Purdue Polytechnic Institute
- 2016—2017 **Research Associate, Newcastle University**  
Postdoctoral researcher at Open Lab
- 2016 **Adjunct Faculty, Indiana University—Purdue University Indianapolis (IUPUI)**  
INFO-H564 Prototyping for Interactive Systems
- 2015 **Lecturer, Indiana University**  
INFO-I310 Multimedia Arts and Technology
- 2011—2015 **Graduate Research Assistant, Indiana University**  
Developed physical prototypes and data visualizations. Conducted interviews, focus groups, and a long-term ethnography. Created, organized, and led design and research workshops. Analyzed and coded qualitative data.
- 2010—2013 **Associate Instructor, Indiana University**  
INFO-I494 Informatics Capstone  
INFO-I542 Foundations of HCI  
INFO-I590 Advanced Prototyping. Developed curriculum and taught physical computing concepts using Arduino, Intel Perceptual Camera, and Lilypad.
- Summer 2011 **Intern of Applied Research, LexisNexis**  
Developed interactive and dynamic mockups for mobile versions of LexisNexis systems. Developed information visualization techniques to be used in analyzing user experience reports. Translated user experience reports into interaction design implications.
- 2010 **Teaching Assistant, Ball State University**  
CS345 Human-Computer Interfaces
- Summer 2009 **Research Assistant, Ball State University**  
Developed a curriculum visualization software application for use in higher education.
- Summer 2008 **Software Developer, Institute for Digital Entertainment and Education**  
Developed commercial software for multi-media, interactive presentations and demonstrations.

### Journal Publications

Bardzell, J., Bardzell, S. Lin, C., Lindtner, S., & **Toombs, A.** HCI's Making Agendas. *Foundations and Trends R in Human-Computer Interaction*, vol. 11, no. 3, pp. 126–200, 2017. DOI: 10.1561/1100000066

**Toombs, A.**, Ferri, G., Grimme, S., Gross, S., Stallings, M. D., Bardzell, J., and Bardzell, S. 2016. Making a critical playshop. *interactions* 24, 1 (December 2016), 34-37. DOI: <https://doi.org/10.1145/3019006>

**Toombs, A.**, Gross, S., Bardzell, S., Bardzell, J. (2016). From Empathy to Care: A Feminist Care Ethics Perspective on Long-Term Researcher-Subject Relations. *Interacting with Computers: Special Issue "Ethics Matter(s)"* 29(1), 45-57. <https://doi.org/10.1093/iwc/iww010>

**Toombs, A.**, Bardzell, S., and Bardzell, J. (2014). Becoming Makers: Hackerspace Member Habits, Values, and Identities. *Journal of Peer Production*, 5.

Gestwicki, P., Haddad, A., **Toombs, A.**, & Sun, F. (2009). An Experience Report and Analysis of Java Technologies in Undergraduate Game Programming Courses. *Journal of Computing Sciences in Colleges*, 25(1), 102-108.

### Conference Proceedings

#### Peer Reviewed

Gray, C. M., Kou, K., Battles, B., Hoggat, J., & **Toombs, A. L.** (2018). The Dark (Patterns) Side of UX Design. In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems (CHI '18)*. ACM, New York, NY, USA, Paper 534, 14 pages. DOI: <https://doi.org/10.1145/3173574.3174108>

Kou, Y., Gray, C. M., **Toombs, A. L.**, & Adams, R. S. (2018). Knowledge Production and Social Roles in an Online Community of Emerging Occupation: A Study of User Experience Practitioners on Reddit. In *Proceedings of the Hawaii International Conference on Systems Sciences (HICSS)* (pp. 2068-2077). Waikoloa Village, HI. <http://hdl.handle.net/10125/50148>

Kou, Y. Gray, C. M., **Toombs, A. L.**, & Nardi, B. (2018). The Politics of Titling: The Representation of Countries in CHI Papers. In *Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems (CHI EA '18)*. ACM, New York, NY, USA, Paper alt16, 10 pages. DOI: <https://doi.org/10.1145/3170427.3188409>

Strohmayr, A., Bellini, R., Meissner, J., Finnigan, S. M., Alabdulqader, E., **Toombs, A. L.**, & Balaam, M. (2018). #CHIiversity: Implications for Equality, Diversity, and Inclusion Campaigns. In *Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems (CHI EA '18)*. ACM, New York, NY, USA, Paper alt03, 10 pages. DOI: <https://doi.org/10.1145/3170427.3188396>

**Toombs, A. L.**, Morrissey, K., Simpson, E., Gray, C. M., Vines, J., & Balaam, M. (2018). Supporting the Complex Social Lives of New Parents. In *CHI'18: Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*. New York, NY: ACM Press. <https://doi.org/10.1145/3173574.3173994>

**Toombs, A. L.**, Gray, C. M., Zhou, G., & Light, A. (2018). Appropriated or Inauthentic Care in Gig-Economy Platforms: A Psycho-linguistic Analysis of Uber and Lyft. In *Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems (CHI EA '18)*. ACM, New York, NY, USA, Paper LBW532, 6 pages. DOI: <https://doi.org/10.1145/3170427.3188657>

**Toombs, A.** (2017). Hackerspace Tropes, Identities, and Community Values. In *DIS'17: Proceedings of the 2017 CHI Conference on Designing Interactive Systems*. (pp.1079-1091). New York, NY: ACM Press. <https://doi.org/10.1145/3064663.3064760> [Awarded **Best Paper**, top 1%]

Gray, C. M., **Toombs, A. L.**, & McKay, C. (2016). Meaning Reconstruction as an Approach to Analyze Critical Dimensions of HCI Research. In *CHI EA '16: CHI'16 Extended Abstracts on Human Factors in Computing Systems* (pp. 328-340). New York, NY: ACM Press. <https://doi.org/10.1145/2851581.2892571>

Gray, C. M., **Toombs, A.**, & Gross, S. (2015). Flow of Competency in UX Design Practice. In *CHI'15: Proceedings of the 2015 CHI Conference on Human Factors in Computing Systems*. New York, NY: ACM Press. <http://dx.doi.org/10.1145/2702123.2702579> [Received the SIGCHI **Best of CHI Honorable Mention Award**, top 5%]

**Toombs, A.**, Bardzell, S., & Bardzell, J. (2015). The Proper Care and Feeding of Hackerspaces: Care Ethics and Cultures of Making. In *CHI'15: Proceedings of the 2015 CHI Conference on Human Factors in Computing Systems*. New York, NY: ACM Press. <https://doi.org/10.1145/2702123.2702522> [Received the SIGCHI **Best of CHI Honorable Mention Award**, top 5%]

Bardzell, J., Bardzell, S., & **Toombs, A.** (2014). "Now that's definitely a proper hack": Self-made Tools in Hackerspaces. In *CHI'14: Proceedings of the 2014 CHI Conference on Human Factors in Computing Systems* (pp. 473-476). New York, NY: ACM Press. <https://doi.org/10.1145/2556288.2557221> [Received the SIGCHI **Best of CHI Honorable Mention Award**, top 5%]

Pace, T., **Toombs, A.**, Gross, S., Pattin, T., Bardzell, J., & Bardzell, S. (2013). A tribute to Mad Skill: Expert Amateur Visuality and World of Warcraft Machinima. In *CHI'13: Proceedings of the 2013 CHI Conference on Human Factors in Computing Systems* (pp. 2019-2028). New York, NY: ACM Press.

Bardzell, S., Gross, S., Wain, J., **Toombs, A.**, & Bardzell, J. (2011). The Significant Screwdriver: Care, Domestic Masculinity, and Interaction Design. In *Proceedings of the 25th BCS Conference on Human-Computer Interaction* (pp. 371-377). Swinton, UK: British Computer Society.

#### **Juried**

**Toombs, A.** (2015). Enacting Care Through Collaboration in Communities of Makers. In *Proceedings of the 18th ACM Conference Companion on Computer Supported Cooperative Work & Social Computing (CSCW'15 Companion, Doctoral Consortium paper)* (pp. 81-84). New York, NY: ACM Press. doi:10.1145/2685553.2699326

Gross, S., **Toombs, A.**, Wain, J., & Walorski, K. (2011). Foodmunity: Designing Community Interactions Over Food. In *CHI '11 Extended Abstracts on Human Factors in Computing Systems* (pp. 1019-1024). New York, NY: ACM Press.

#### **Peer Reviewed Conference Presentations**

Gray, C. M., & **Toombs, A. L.** (2018, April). Forming a Design Identity in Computing Education Through Reflection and Peer Interaction. Paper Session at the 2018 AERA Annual Meeting, San Antonio, TX.

#### **Book Chapters**

**Toombs, A.**, Bardzell, S., and Bardzell, J. (2014). Becoming Makers: Hackerspace Member Habits, Values, and Identities. In J. Söderberg & Maxigas (Eds.) *Book of Peer Production: Special FSCONS Edition* (pp. 36-45). Aarhus, DK: NSU Press. [Invited from Special Issue of Journal of Peer Production]

#### **Workshops Convened**

Toombs, A. L., Dow, A., Vines, J., Gray, C. M., Dennis, B., Clarke, R., & Light, A. (2018). Designing for Everyday Care in Communities. In *Proceedings of the 2018 ACM Conference Companion Publication on Designing Interactive Systems (DIS '18 Companion)*. ACM, New York, NY, USA, 391-394. DOI: <https://doi.org/10.1145/3197391.3197394>

Lazar, A., Toombs, A. L., Morrissey, K., Kenning, G., Boger, J., & Brankaert, R. (2018). HClxDementia Workshop: Engaging People Living with Dementia. In *Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems (CHI EA '18)*. ACM, New York, NY, USA, Paper W01, 7 pages. DOI: <https://doi.org/10.1145/3170427.3170613>

Morrissey, K., **Toombs, A. L.**, Lazar, A., and Boger, J. (2017). HClxDementia: The Role of Technology & Design in Dementia. In *Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems (CHI EA '17)*. New York, NY: ACM Press. <https://doi.org/10.1145/3027063.3027083>

#### **Invited Talks and Workshops**

2017, July 17. Gray C. M., & Toombs, A. *Qualitative Inquiry: Thematic Analysis, Meaning Reconstruction, and Data Management*. Open Lab, Newcastle University, Newcastle upon Tyne, United Kingdom.

2016, November 18. Gray, C. M., & Toombs, A. *Tracing Meaning-Making Through Reconstructive Analysis*. Participatory Information Technology Colloquium, Aarhus University, Aarhus, Denmark.

2013, October 8. Guest Lecturer, INFO-I310: Media, Arts, and Technology. *Expert Amateur Visual Practices in WoW Machinima*. Indiana University, Bloomington, IN.

2013, October 7, 14, & 21. Guest Lecturer, INFO-I590: Advanced Prototyping. *Interactive Prototyping with Sensors*. Indiana University, Bloomington, IN.

2013, October 3. Invited Speaker, IU Makes Lecture Series. *Self-Made Tools in Hackerspaces*. Bloomington, IN.

#### Invited Research Institute

2015. *Summer Institute*, Consortium for the Science of Sociotechnical Systems (CSST).

#### Awards

2017. Best Paper Award, ACM DIS Conference on Designing Interactive Systems.

2015. 2 x Best Paper Award Nominations, ACM SIGCHI Conference on Human Factors in Computing Systems.

2014. Best Paper Award Nomination, ACM SIGCHI Conference on Human Factors in Computing Systems.

#### Professional Service

##### **Reviews**

2018. Reviewer for Human-Computer Interaction, for NordiCHI, for CHI, for DIS, for CSCW, and for alt.chi.

2017. Reviewer for IJHCS, for Transactions on Computer-Human Interaction (ToCHI), for CHI, for DIS, for CSCW, for DIS Pictorials, for C&C, and for alt.chi.

2016. Reviewer for CHI, for DIS, for CSCW, for alt.chi, for IxD&A's special issue on making, for Polity books, for the HCI journal, and for Science Technology and Human Values (ST&HV).

2015. Reviewer for CHI, for DIS, for CSCW, and for alt.chi.

2014. Reviewer for CHI, for DIS, for CSCW, for C&C, and for alt.chi.

2013. Reviewer for Journal of Peer Production.

##### **Associate Chair**

2018. Associate Chair for Designing Interactive Systems (DIS).

2017. Associate Chair for the Late Breaking Work track of ACM SIGCHI 2017.

##### **Track Chair**

2018. Track Organizer for Design Research Society (DRS).

##### **Session Chair**

2018. Session Chair for Designing Interactive Systems (DIS).

2017. Session Chair for DIS and for CHI.

##### **Other**

2014-2016. Student Volunteer for ACM SIGCHI conference.

2014. Volunteer for Making Subjects Conference. Indiana University Bloomington. Technical Volunteer for Clyde, Arduino, XBee Integration session.

#### Community Service

2012-2014. Bloominglabs. Making, hacking, and tinkering workshops; event organization.

#### Media Coverage

2014, January 18. Featured post on Instructables.

<http://www.instructables.com/id/The-Pee-Timer-Connecting-the-Arduino-the-Intel-Per/>

#### Professional Affiliations

Association for Computing Machinery (ACM)