

KYLE J. HARMS

kyle.harms@cornell.edu
<https://kharms.infosci.cornell.edu/>

EDUCATION

Washington University in St. Louis

Ph.D. in Computer Science 2010 – 2017
Specialization in Human-Computer Interaction

M.S. in Computer Science 2006 – 2009

Truman State University

B.S. in Computer Science 2001 – 2005
Minor in Spanish

TEACHING EXPERIENCE

Lecturer 2017 – *present*
Cornell University

Intermediate Design and Programming for the Web Spring 2018
undergraduate

MPS Project Practicum Fall 2017, Spring 2018
graduate

Introductory Design and Programming for the Web Fall 2017
undergraduate

Graduate Research Assistant 2010 – 2017
Washington University in St. Louis

Data Structures and Algorithms Summer 2016
undergraduate

Human-Computer Interaction Methods Summer 2016
graduate

PROFESSIONAL EXPERIENCE

The Boeing Company 2005 – 2010
Software Engineer Level 2 St. Louis, MO

PUBLICATIONS

Full Length Refereed Publications

Ichinco, Michelle, Kyle J. Harms, and Caitlin Kelleher (2017). “Towards Understanding Successful Novice Example Use in Blocks-Based Programming.” In: *Journal of Visual Languages and Sentient Systems: Special Issue on Blocks Programming*.

- Harms, Kyle J., Evan Balzuweit, Jason Chen, and Caitlin Kelleher (2016). “Learning Programming from Tutorials and Code Puzzles: Children’s Perceptions of Value.” In: *Visual Languages and Human-Centric Computing (VL/HCC), 2016 IEEE Symposium on*. Cambridge, United Kingdom.
- Harms, Kyle J., Jason Chen, and Caitlin L. Kelleher (2016). “Distractors in Parsons Problems Decrease Learning Efficiency for Young Novice Programmers.” In: *Proceedings of the 2016 ACM Conference on International Computing Education Research*. ICER ’16. Melbourne, Vic, Australia: ACM, pp. 241–250. DOI: 10.1145/2960310.2960314.
- Harms, Kyle J., Noah Rowlett, and Caitlin Kelleher (2015). “Enabling independent learning of programming concepts through programming completion puzzles.” In: *Visual Languages and Human-Centric Computing (VL/HCC), 2015 IEEE Symposium on*. Atlanta, Georgia, USA, pp. 271–279. DOI: 10.1109/VLHCC.2015.7357226.
- Harms, Kyle J., Dennis Cosgrove, Shannon Gray, and Caitlin Kelleher (2013). “Automatically Generating Tutorials to Enable Middle School Children to Learn Programming Independently.” In: *Proceedings of the 12th International Conference on Interaction Design and Children*. IDC ’13. New York, New York, USA: ACM, pp. 11–19. DOI: 10.1145/2485760.2485764.

Short Refereed Publications

- Harms, Kyle J., Jordana H. Kerr, Michelle Ichinco, Mark Santolucito, Alexis Chuck, Terian Kosciak, Mary Chou, and Caitlin L. Kelleher (2012). “Designing a community to support long-term interest in programming for middle school children.” In: *Proceedings of the 11th International Conference on Interaction Design and Children*. IDC ’12. Bremen, Germany: ACM, pp. 304–307. DOI: 10.1145/2307096.2307152.
- Harms, Kyle J., Jordana H. Kerr, and Caitlin L. Kelleher (2011). “Improving learning transfer from stencils-based tutorials.” In: *Proceedings of the 10th International Conference on Interaction Design and Children*. IDC ’11. Ann Arbor, Michigan, USA: ACM, pp. 157–160. DOI: 10.1145/1999030.1999050.

Other Publications

- Harms, Kyle J. (2015). “The impact of distractors in programming completion puzzles on novice programmers position statement.” In: *Blocks and Beyond Workshop (Blocks and Beyond), 2015 IEEE*. Atlanta, Georgia, USA, pp. 9–10. DOI: 10.1109/BLOCKS.2015.7368990.
- Ichinco, Michelle, Kyle J. Harms, and Caitlin Kelleher (2015). “Utilizing Programmer Communities for End User Programmer Feedback.” In: *International Reports on Socio-Informatics (IRSI)*. Proceedings of the CHI 2015 - Workshop on End User Development in the Internet of Things Era 12.2, pp. 15–20.
- Harms, Kyle J. (2014). “Towards a programming environment that adaptively suggests examples and corresponding puzzles based on programmer skill.” In: *Visual Languages and Human-Centric Computing (VL/HCC), 2014 IEEE Symposium on*. Melbourne, Vic, Australia, pp. 185–186. DOI: 10.1109/VLHCC.2014.6883047.
- Medlock-Walton, Paul, Kyle J. Harms, Eileen T. Kraemer, Karen Brennan, and Daniel Wendel (2014). “Blocks-based Programming Languages: Simplifying Programming for Different Audiences with Different Goals.” In: *Proceedings of the 45th ACM Technical Symposium on Computer Science Education*. SIGCSE ’14. Atlanta, Georgia, USA: ACM, pp. 545–546. DOI: 10.1145/2538862.2538873.

Harms, Kyle J. (2013). “Applying cognitive load theory to generate effective programming tutorials.”
In: *Visual Languages and Human-Centric Computing (VL/HCC), 2013 IEEE Symposium on*. San Jose, California, USA, pp. 179–180. DOI: 10.1109/VLHCC.2013.6645274.

Software

Looking Glass <https://lookingglass.wustl.edu/novice-programming-environment-for-middle-school-children> (open source)

SERVICE

Hiring Committee Fall 2017 – Spring 2018
Computing and Information Science Lecturer

TA Training Spring 2018
Information Science

Reviewer 2018
Transactions on Computing Education (ToCE)

Reviewer 2017
International Journal of Child-Computer Interaction (IJCCI)

Reviewer 2017
Designing Interactive Systems (DIS)

Reviewer 2016
Special Interest Group on Computer-Human Interaction (SIGCHI)

Reviewer 2016
Special Interest Group on Computer Science Education (SIGCSE)

Invited Talk 2016
Knox College

Student Volunteer 2011, 2012
Special Interest Group on Human-Computer Interaction (SIGCHI)