

# KEITH R BUJAK, PhD

USER EXPERIENCE LEAD FOR SOCIAL IMPACT

KeithRBujak.com | KRBujak@icloud.com | @KRBujak

## ABOUT ME

For over 20 years, I have worked to end social inequity through better research and novel solutions. Since my days of tutoring in an under-resourced school while earning an engineering degree, I have explored and created solutions to improve lives. From inspiring students as a special education teacher to influencing academic discourse as a published author, I am a constant advocate of putting people first in the design process, particularly those who are underserved.

## EXPERIENCE

*UX Lead*, John Deere (Iowa) 2016-Present

At John Deere, a global company committed to those linked to the land, I am seeking ways to improve the working experience of those who grow our food and build our infrastructure.

- Defining a vision for digital products to bring clarity and intentionality to our customers' experiences, working toward a 2030 strategy.
- Influencing approaches to accessibility and inclusive design, through exploring metrics and establishing strategies to ensure our solutions are usable by all.
- Working to build strong relationships between UX, product teams, and users through insightful research activities and clearly articulating the implications.

*Senior UX Engineer*, John Deere (Illinois) 2014-2016

- Created a working prototype wearable device that delivers timely instructional content to under-trained workers, engaging them in the design process.
- To grow the human centered design practice, I guided dozens of junior researchers and designers, and created 12 short courses, which have been accessed by hundreds of employees.

*UX Research Assistant*, Georgia Institute of Technology (Georgia) 2007-2014

Returning to school at a leading research university committed to improving the human condition, I was afforded numerous opportunities to affect some of our biggest social challenges.

- Secured grants from the Gates Foundation totaling \$150,000 to create three massive open online courses (MOOCs). For one course about psychology, I established collaboration with Carnegie Mellon to bring the latest, free curriculum to 41,000 students globally.
- With an emphasis on veterans, I coordinated the creation of a highly individualized Health IT training program, working with the technology transfer office and community college systems.

Having earned an advanced degree, it was now time to bring my knowledge and experience to those who feed and build the world.

*Academic Program Coordinator*, Johns Hopkins University (Maryland) 2006-2007

*Research Assistant*, American Institutes for Research (District of Columbia) 2005-2006

*Special Education Teacher*, Teach for America (Louisiana) 2003-2005

## DISTINCTIONS

*Leadership Summit Attendee*, John Deere 2018

*Mobile App of the Year Finalist*, Prometheus Awards 2017

*Enterprise Innovation Award*, John Deere 2017

*Certificate of Excellence in Reviewing*, Journal of Computers & Education 2016

*Student Member with Honors*, Human Factors and Ergonomics Society 2013

*100 Most Important Future Ed Tech People*, Tech & Learning Magazine 2010

## VOLUNTEERING

*Food Drive Collector*, Food Bank of Iowa 2019-Present

*Reviewer*, Journal of Computers & Education 2013-Present

*Reviewer*, ISO 9241 (Human-centered design) and ISO 25065 (User requirements) 2017

*Campus Recruitment Ambassador*, Teach for America 2013-2014

*Lab Manager*, Problem Solving and Educational Technology Lab 2008-2014

*Augmented Reality Demo Volunteer*, USA Science and Engineering Festival 2012

	<i>Committee Member</i> , National Ergonomics Month	2010-2012
	<i>HF/E Demonstration Volunteer</i> , Science at Hand Day at Fernbank Museum	2008-2012
	<i>President</i> , Human Factors and Ergonomics Society, Georgia Tech Chapter	2008-2010
	<i>Volunteer Recruiter</i> , Teach for America	2005-2007
	<i>Classroom Assistant</i> , America Reads America Counts	1999-2003
EDUCATION	DOCTOR OF PHILOSOPHY, ENGINEERING PSYCHOLOGY & SUSTAINABLE DESIGN Georgia Institute of Technology, Atlanta, GA	2014
	BACHELOR OF SCIENCE, MECHANICAL ENGINEERING & PSYCHOLOGY Rensselaer Polytechnic Institute, Troy, NY	2003
PROFESSIONAL ASSOCIATIONS	<i>Member</i> , User Experience Professionals Association	2015-Present
	<i>Member</i> , Industrial Designers Society of America	2013-2016
	<i>Member</i> , Human Factors and Ergonomics Society, National Chapter	2007-2015
	<i>Member</i> , CHI, Atlanta Chapter	2010-2014
	<i>Member</i> , Human Factors and Ergonomics Society, Georgia Tech Chapter	2007-2014
PUBLICATIONS & PRESENTATIONS	JOURNALS & BOOK CHAPTERS	
	Baker, P. M. A., Breznitz, S., Seavey, A., & <b>Bujak, K. R.</b> (2016). 21st century universities as drivers for innovation: The dimensions of learning, research, and collaboration. In U. Hilpert (Ed.), <i>Handbook of politics and technology</i> (pp. 236-248). Berlin: Routledge.	
	Margulieux, L. E., Chen, D., McDonald, J. D., <b>Bujak, K. R.</b> , Gable, T. M., Darling, C. M., Schaeffer, L. M., & Barg-Walkow, L. H. (2016). Online collaboration applications evaluated by ease of use. <i>Ergonomics in Design</i> 24 (2), 21-30.	
	<b>Bujak, K. R.</b> , Radu, I., Catrambone, R., MacIntyre, B., Zheng, R., & Golubski G. (2013). A psychological perspective on augmented reality in the mathematics classroom. <i>Computers &amp; Education</i> , 68, 536-544.	
	Fausset, C. B., <b>Bujak, K. R.</b> , Kline, K. A., Beer, J. M., Smarr, C.-A., Adams, A. E., McBride, S. E., & Burnett, J. S. (2012). Leaving the lecture hall: Lessons learned conducting HF/E outside the classroom. <i>Ergonomics in Design</i> 20(3), 23-26.	
	Caballero, M. D., Kohlmyer, M. A., Greco, E. F. Murray, E. R., <b>Bujak, K. R.</b> , Marr, M. J., <i>et al.</i> (2012). Comparing large lecture mechanics curricula using the Force Concept Inventory: A five thousand student study. <i>American Journal of Physics</i> 80(7), 638-644.	
	PANELS & INVITED PRESENTATIONS	
	<b>Bujak, K. R.</b> (2016). <i>You are solving tomorrow's challenges today</i> . Keynote address delivered at the FIRST LEGO League Challenge, Champaign, IL, US.	
	<b>Bujak, K. R.</b> (2015). <i>User experience: Training materials and application of the practice</i> . Presented at the John Deere Enterprise Training Collaboration Conference, Rock Island, IL, US.	
	<b>Bujak, K. R.</b> , Trenhalie, M., & Jackson, A. (2015). The Student Employment Model: Students in the Innovation Strategy. In D. F Cohen (Chair), <i>Pygmalion Tech Festival</i> . Panel conducted at the University of Illinois Urbana Champaign, Champaign, IL, US.	
	<b>Bujak, K. R.</b> , Moberly, L., Miller-Criner, L., Trenhaile, M., & Jones, B. (2015). Design at John Deere. In D. F Cohen (Chair), <i>Graphic design</i> . Panel conducted at the School of Art and Design, University of Illinois Urbana Champaign, Champaign, IL, US.	
	<b>Bujak, K. R.</b> , Tilton, A., & Corrales, G. P. (2015). Wearable technology at John Deere. In P. Wagner (Chair), <i>Wearables</i> . Panel conducted at the meeting of the University of Illinois Research Park Mobile Development Day, Champaign, IL, US.	
	<b>Bujak, K. R.</b> , Taylor, K., Wondra, N., & Eckhardt, J. (2014). Student research opportunities at John Deere. In L. Weisskopf-Bleill (Chair), <i>Research park tech talk</i> . Panel conducted at the meeting of the University of Illinois Urbana Champaign, Champaign, IL, US.	

- Bujak, K. R.**, Sutton, C., & Dow, B. (2014). *Wearable technology: The other side of “going mobile.”* Presented at the John Deere Enterprise Electronics Conference, Waterloo, IA, US.
- Margulieux, L. E., **Bujak, K. R.**, McCracken, W. M., & Majerich, D. (2014). *Hybrid, blended, flipped, and inverted: Defining terms in a two dimensional taxonomy.* Paper presented at the Hawaii International Conference on Education (HICE), Honolulu, HI, US.
- Rudiger, L., Spencer, S., & **Bujak, K. R.** (2013). *Room to grow: Enhancing learning by supporting autonomy.* Paper presented at the Society for the Teaching of Psychology Best Practices Conference, Atlanta, GA, US.
- Bujak, K. R.**, & Catrambone, R. (2013). *A divergence between assigned and reported learning strategy use.* Paper presented at the 15th Biennial Conference of the European Association for Research in Learning and Instruction (EARLI), Munich, Germany.
- Bujak, K. R.**, Catrambone, R., Caballero, M., Schatz, M., & Marr, M. J. (2012). *Can Students Learn a Principled Approach to Solving Problems in an Introductory Physics Course?* Paper presented at the Psychonomic Society Annual Meeting. Minneapolis, MN, USA.
- Bujak, K. R.**, Baker, P. M. A., DeMillo, R., & Sandulli, F. D. (2012). *The evolving university: Beyond disruptive change and institutional innovation.* Paper presented at the 22nd World Congress of Political Science. Madrid, Spain.
- Baker, P. M. A., **Bujak, K. R.**, & DeMillo, R. (2012). *The evolving university: Disruptive change and institutional innovation.* Paper presented at the International Conference on Software Development for Enhancing Accessibility and Fighting Info-exclusion, Douro Region, Portugal.
- Bujak, K. R.** (2012). *Psychology & MOOCs: A Discussion.* Invited colloquium presentation to the School of Psychology, Georgia Tech. Atlanta, GA.
- Bujak, K. R.**, Kline, K., & Margulieux, L. (2011). *Problem solving and educational technology lab overview.* Invited colloquium presentation to the Undergraduate Human Factors Course, Georgia Tech. Atlanta, GA.
- Bujak, K. R.**, Eiriksdottir, E. (2010). *The wonders of excel.* Invited workshop presentation for the Engineering Psychology Workshop Series, Georgia Tech. Atlanta, GA.
- Bujak, K. R.** (2010). *A learning framework: A divergence between assigned and reported activities.* Invited colloquium presentation to the School of Psychology, Georgia Tech. Atlanta, GA.
- Bujak, K. R.**, Bailey Fausset, C., & DeBlasio, J. (2010). *Introduction to human factors and ergonomics.* Invited presentation to Industrial Design class, Kell High School. Marietta, GA.
- Bujak, K. R.** (2009). *Learning science as inquiry through the delegation of information communication.* Invited colloquium presentation to the School of Psychology, Georgia Tech. Atlanta, GA.

## REPORTS

- Bujak, K. R.**, Baker, P. M. A., & DeMillo, R. (2012). *The Evolving University: Disruptive Change and Institutional Innovation* (C21U Paper #22012). Atlanta, GA: Georgia Institute of Technology, Center for 21<sup>st</sup> Century Universities.
- Bujak, K. R.**, Olson, K. E., Burnett, J. S., Olsheski, J. D., Smarr, C., Barg-Walkow, L., *et al.* (2012). *Usability assessment update of the residential, agriculture, commercial, and golf units of <http://www.deere.com>* (HFES/GT-TR-1201). Atlanta, GA: Georgia Institute of Technology, School of Psychology, Human Factors and Ergonomics Society.
- Bujak, K. R.** (2010). *A framework of passive-active-constructive study techniques: A divergence between assigned and reported behaviors* (Master's thesis). Georgia Institute of Technology, Atlanta, GA, US.
- Kline, K. A., Smarr, C., **Bujak, K. R.**, Pop, V., & Olsheski, J. D. (2010). *Website evaluation of the education sections of <http://zooatlanta.org>* (HFES/GT-TR-1001). Atlanta, GA: Georgia Institute of Technology, School of Psychology, Human Factors and Ergonomics Society.

**Bujak, K. R.**, Adams, A., Baranak, A. S., Beer, J. M., Burnett, J. S., DeBlasio, J. M., *et al.* (2009). *Usability assessment of the residential, agriculture, commercial, and golf units of <http://www.deere.com>* (HFES/GT-TR-0902). Atlanta, GA: Georgia Institute of Technology, School of Psychology, Human Factors and Ergonomics Society.

Adams, A., Beer, J. M., **Bujak, K. R.**, Kline, K. A., McBride, S., and Smarr, C. (2009). *Usability assessment of <http://www.psychology.gatech.edu>* (HFES/GT-TR-0901). Atlanta, GA: Georgia Institute of Technology, School of Psychology, Human Factors and Ergonomics Society.

#### POSTERS

**Bujak, K. R.**, Catrambone, R., Caballero, M. D., Marr, M. J., Schatz, M. F. & Kohlmyer, M. A. (2011). *Comparing the matter and interactions curriculum with a traditional physics curriculum: A think aloud study*. Poster presented at the Annual Meeting of the American Educational Research Association (AERA), New Orleans, LA, US.

Catrambone, R., **Bujak, K. R.**, Eiriksdottir, E., Gane, B. & Kline, K. (2010). *Problem solving and educational technology lab*. Poster presented at the 54<sup>th</sup> Annual Meeting of the Human Factors and Ergonomics Society (HFES), San Francisco, CA, US.

Catrambone, R., **Bujak, K. R.**, Eiriksdottir, E., Gane, B. & Kline, K. (2009). *Problem solving and educational technology lab*. Poster presented at the 53<sup>rd</sup> Annual Meeting of the Human Factors and Ergonomics Society (HFES), San Antonio, TX, US.

**Bujak, K. R.** & Catrambone, R. (2008). *Using text messages to support complex learning tasks*. Poster presented at the 49<sup>th</sup> Annual Meeting of the Psychonomic Society, Chicago, IL, US.

Catrambone, R., **Bujak, K. R.**, Eiriksdottir, E., Gane, B. & Kline, K. (2008). *Problem solving and educational technology lab*. Poster presented at the 52<sup>nd</sup> Annual Meeting of the Human Factors and Ergonomics Society (HFES), New York, NY, US.

#### PHOTOGRAPHY

**Bujak, K. R.** (Photographer). (2017). *A robot handing an older man mediation* [photograph]. New York, NY: Pearson Publishing.

#### MEDIA COVERAGE

Scoble, R. (2016, January). Facebook Live interview with Keith R Bujak. <https://www.facebook.com/RobertScoble/videos/10153852305869655/>

Preston, J. (2016, May). Georgia Tech research finds that web apps for the workplace succeed to varying degrees. *GVU Center News Brief*. <http://gvu.gatech.edu/georgia-tech-researchers-find-web-apps-workplace-are-succeeding-varying-degrees>