KEITH R BUJAK, PhD

USER EXPERIENCE LEAD

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LEADERSHIP & RESEARCH EXPERIENCE

User Experience Lead, John Deere Intelligent Solutions Group, Urbandale, IA Apr/16-Present
- Aligning cloud-connected experiences across mobile, desktop, and vehicle interfaces.
- Supporting runway teams with Design Thinking, Agile, JAM, and Lean Startup approaches.
- Researching John Deere and competitor products to design high value experiences.
- Identifying solutions that meet the business needs of multiple groups within and beyond ISG.

Senior User Experience Engineer, John Deere Tech. Innov. Center, Champaign, IL Apr/14-Apr/16
- Defined the experience for a cross-platform (mobile, desktop, in-cab) logistics management tool to help support the adoption of other multi-million dollar development projects.
- Lead a multi-faceted approach – research, workshops, development, evangelism – to understand how wearable technology can improve customers' experiences.
- Lead efforts to define the strategic vision for mobile experiences using contextual design.
- Strengthened the UX practice by mentoring junior professionals and deploying custom courses across the company.
- Collaborated with design and development external partners using an Agile approach.

User Experience Research Assistant, Georgia Institute of Technology, Atlanta, GA Aug/07-Apr/14
- Supported the integration of massive and adaptive online psychology courses.
- Coordinated a multi-institution partnership for personalized health IT training.
- Designed an eye-tracking and interview experiment to map music to animal movements.
- Designed a contextual data collection approach situated in an actual restaurant.
- Used a think aloud approach to uncover flaws in the reasoning processes of physics students.
- Worked for: Problem Solving and Educational Technology Lab (Dr. Richard Catrambone), Everyday Computing Lab (Dr. Beth MyNatt), Center for 21st Century Universities (Dr. Richard DeMillo), among others

Academic Program Coordinator, Johns Hopkins University, Baltimore, MD Jun/06-May/07
- Advised undergraduate students regarding pathways to achieve their academic goals.
- Supported teaching assistants through the development of a collaborative workspace.

Research Assistant, American Institutes for Research, Washington, DC Jun/05-May/06
- Wrote and refined demographic research tools to better understand students and their needs.
- Developed a protocol for reviewing and selecting accessible science curriculum kits.
- Performed analyses to yield insights into adult education programs.
- Worked for: National Assessment of Educational Progress, National Reporting System for Adult Education, Access Center

Special Education Teacher, Teach for America, New Orleans, LA Jun/03-May/05
- Selected as a Teach for America corps member.
- Advocated for special education students to ensure academic and social inclusion.
- Designed a web interface to allow students to learn in autonomous pairs.
- Brainstormed, tested and refined numerous incentive systems to build intrinsic motivation.

HONORS AND DISTINCTIONS

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

Human Subjects Researcher, Collaborative Institutional Training Initiative 2007-2014

Student Member with Honors, Human Factors and Ergonomics Society 2013

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

Certified Special Education Teacher, Louisiana State Department of Education 2003-2007

EDUCATION

DOCTOR OF PHILOSOPHY, ENGINEERING PSYCHOLOGY

Georgia Institute of Technology, Atlanta, GA 2014

MASTER OF SCIENCE, ENGINEERING PSYCHOLOGY

Georgia Institute of Technology, Atlanta, GA 2010

BACHELOR OF SCIENCE, MECHANICAL ENGINEERING & PSYCHOLOGY

Rensselaer Polytechnic Institute, Troy, NY 2003

SERVICE

REVIEWER

Reviewer, Journal of Computers & Education 2013-Present

Reviewer, ISO 9241 (Process for enabling, executing and assessing human-centered design within organizations) and ISO 25065 (User requirements specification) 2017

Reviewer, Annual Meeting of the Human Factors and Ergonomics Society 2010-2012

LEADERSHIP

Social Media Manager, Ergonomics in Design Blog 2013-2014

Awards Coordinator, HFES Training Technical Group 2013-2014

Campus Recruitment Ambassador, Teach for America 2013-2014

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

Tutor, Grades 4-12 Math and Science, SAT Math 2008-2014

Committee Member, Engineering Psychology Advisory Committee 2010-2012

Committee Member, National Ergonomics Month Committee 2010-2012

Student Representative, Georgia Tech Engineering Psychology Program 2010-2011

Senator, Georgia Tech Student Government Association 2010-2011

President, Human Factors and Ergonomics Society Georgia Tech Chapter 2008-2010

Volunteer Recruiter, Teach for America 2005-2007

Tutor, Tutor Time 2000-2003

Classroom Assistant, America Reads, America Counts 1999-2003

CONFERENCES & CONVENTIONS

Session Chair, Georgia Tech Engineering Psychology Colloquium 2013

Student Volunteer, International Symposium on Mixed and Augmented Reality 2012

Augmented Reality Demo Volunteer, USA Science and Engineering Festival 2012

Tour Volunteer, Usability Professionals' Association (UPA) Conference 2011

Student Volunteer, Computer–Human Interaction (CHI) Conference 2010

HF/E Demonstration Volunteer, Science at Hand Day at Fernbank Museum 2008-2012

PROFESSIONAL ASSOCIATIONS

Member, User Experience Professionals Association 2015-Present

Member, Industrial Designers Society of America 2013-2016

Member, Human Factors and Ergonomics Society National Chapter 2007-2015

Member, CHI Atlanta Chapter 2010-2014

Member, Human Factors and Ergonomics Society Georgia Tech Chapter 2007-2014

Member, American Psychological Association 2013-2014

Junior Researcher, European Association for Research in Learning & Instruction 2013-2014

Member, Special Interest Group on Human-Computer Interaction 2010-2011

Member, American Psychological Association, Division 21 2009-2010

SOFTWARE & LANGUAGES

Operating Systems: Microsoft Windows, Apple OSX, Apple iOS, Google Android

Productivity: Acrobat Professional, Endnote, Mendeley, Microsoft Office

Web: WordPress, HTML, Dreamweaver, Drupal

Statistics: SPSS, Minitab, Maple

PUBLICATIONS & PRESENTATIONS

PEER-REVIEWED PUBLICATIONS

Baker, P. M. A., Breznitz, S., Seavey, A., & **Bujak, K. R.** (2016). 21st century universities as drivers for innovation: The dimensions of learning, research, and collaboration. In U. Hilpert (Ed.), *Handbook of politics and technology* (pp. 236-248). Berlin: Routledge.

Margulieux, L. E., Chen, D., McDonald, J. D., **Bujak, K. R.**, Gable, T. M., Darling, C. M., Schaeffer, L. M., & Barg-Walkow, L. H. (2016). Online collaboration applications evaluated by ease of use. *Ergonomics in Design 24* (2), 21-30.

Bujak, K. R., Radu, I., Catrambone, R., MacIntyre, B., Zheng, R., & Golubski G. (2013). A psychological perspective on augmented reality in the mathematics classroom. *Computers & Education, 68,* 536-544.

Fausset, C. B., **Bujak, K. R.**, 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. *Ergonomics in Design 20*(3), 23-26.

Caballero, M. D., Kohlmyer, M. A., Greco, E. F. Murray, E. R., **Bujak, K. R.**, Marr, M. J., *et al*. (2012). Comparing large lecture mechanics curricula using the Force Concept Inventory: A five thousand student study. *American Journal of Physics 80*(7), 638-644.

PANELS, INVITED TALKS & PRESENTATIONS

Bujak, K. R. (2016). *You are solving tomorrow's challenges today.* Keynote address delivered at the FIRST LEGO League Challenge, Champaign, IL, US.

Bujak, K. R. (2015). *User experience: Training materials and application of the practice.* Presented at the John Deere Enterprise Training Collaboration Conference, Rock Island, IL, US.

Bujak, K. R., Trenhalie, M., & Jackson, A. (2015). The Student Employment Model: Students in the Innovation Strategy. In D. F Cohen (Chair), *Pygmalion Tech Festival.* Panel conducted at the University of Illinois Urbana Champaign, Champaign, IL, US.

Bujak, K. R., Moberly, L., Miller-Criner, L., Trenhaile, M., & Jones, B. (2015). Design at John Deere. In D. F Cohen (Chair), *Graphic design.* Panel conducted at the School of Art and Design, University of Illinois Urbana Champaign, Champaign, IL, US.

Bujak, K. R., Tilton, A., & Corrales, G. P. (2015). Wearable technology at John Deere. In P. Wagner (Chair), *Wearables.* Panel conducted at the meeting of the University of Illinois Research Park Mobile Development Day, Champaign, IL, US.

Bujak, K. R., Taylor, K., Wondra, N., & Eckhardt, J. (2014). Student research opportunities at John Deere. In L. Weisskopf-Bleill (Chair), *Research park tech talk.* 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 Biennal 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 21st 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.

CONFERENCE 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 54th 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 53rd 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 49th 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 52nd 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

IANS (2016, May). Download these free web apps to multi-task better.

Yahoo!News - https://in.news.yahoo.com/download-free-apps-multi-task-better-072806974.html

The Times of India, The Economic Times - http://timesofindia.indiatimes.com/tech/tech-news/Download-these-free-web-apps-to-multi-task-better/articleshow/52446803.cms

The Statesman - http://www.thestatesman.com/mobi/news/science-and-tech/get-these-web-apps-for-easier-multi-tasking/144673.html

Business Standard - http://www.business-standard.com/article/news-ians/download-these-free-web-apps-to-multi-task-better-116052600461_1.html

Zee News - http://zeenews.india.com/news/net-news/these-free-web-apps-can-help-multi-task-effectively_1889067.html

The Free Press Journal - http://www.freepressjournal.in/download-these-free-web-apps-to-multi-task-better/858415

Three Novices - https://threenovices.wordpress.com/2016/05/26/3novices-download-these-free-web-apps-to-multi-task-better/

Udaipur Kiran - http://udaipurkiran.com/download-these-free-web-apps-to-multi-task-better/

Download Jozz - http://downloadjozz.blogspot.com/2016/05/download-these-free-web-apps-to-multi.html

Vishva Times - http://www.vishvatimes.com/download-these-free-web-apps-to-multi-task-better/

LA Indian - http://www.laindian.com/desi/newsdetail.asp?id=194279

Can India - http://www.canindia.com/these-free-apps-will-help-you-multi-task-efficiently-online/

Smith, L. (2016, May). Which free web apps for collaboration are the most user-friendly?.

EurekAlert.org - http://www.eurekalert.org/pub_releases/2016-05/hfae-wfw052516.php.

Newswise.com - http://newswise.com/articles/which-free-web-apps-for-collaboration-are-the-most-user-friendly

Phys.org - http://phys.org/news/2016-05-free-web-apps-collaboration-user-friendly.html

Livenetworknews.com - http://livenetworknews.com/bz/article/100100100101816319

Scienmag.com - http://scienmag.com/which-free-web-apps-for-collaboration-are-the-most-user-friendly/

Allmagnews.com - http://allmagnews.com/which-free-web-apps-for-collaboration-are-the-most-user-friendly/

Healthmedicinet.com - http://healthmedicinet.com/i/which-free-web-apps-for-collaboration-

are-the-most-user-friendly/
Science Codex -
http://www.sciencecodex.com/which_free_web_apps_for_collaboration_are_the_most_userfriendly-183151
Calishain, T. (2016, May). Thursday buzz: May 26, 2016. *Research Buzz.* https://researchbuzz.me/2016/05/26/ congress-gov-satellite-imagery-texas-floods-more-thursday-buzz-may-26-2016/ and https://rbfirehose. com/2016/05/25/research-the-usability-of-online-collaborative-apps/