

René F. Kizilcec

Curriculum Vitae

Department of Communication
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Education

Ph.D., Communication, Stanford University, Stanford, CA, Expected 2017.
Committee: Geoffrey Cohen, Jeremy Bailenson, Jeff Hancock, John Mitchell, Candace Thille.
Dissertation: *Identity, Threat, and Belonging in Digital Learning Environments*.

M.S., Statistics, Stanford University, Stanford, CA, 2015.

B.A., Philosophy and Economics, University College London, London, England, 2011.
Graduated with 1st class Honors.

Research Interests

Online learning (MOOCs, higher education, professional development), social psychology (social identity, social belonging, self-regulation, culture), human-computer interaction, algorithm transparency, experimental and computation social science, social networks.

Publications

Refereed Journal Articles

Kizilcec, R. F., Saltarelli, A., Reich, J., & Cohen, G. L. (2017). Closing global achievement gaps in MOOCs. *Science*, 355(6322), 249.

Kizilcec, R. F. & Cohen, G. L. (2017). Eight-minute self-regulation intervention raises educational attainment at scale in individualist but not collectivist cultures. *Proceedings of the National Academy of Sciences (PNAS)*, 114(17), 4348–4353.

Kizilcec, R. F., Perez-Sanagustin, M., & Maldonado, J. J. (2017). Self-Regulated learning strategies predict learner behavior and goal attainment in Massive Open Online Courses. *Computers & Education*, 104, 18-33.

Eckles, D., **Kizilcec**, R. F., & Bakshy, E. (2016). Estimating peer effects in networks with peer encouragement designs. *Proceedings of the National Academy of Sciences (PNAS)*, 113(27), 7316-7322.

Li, J., **Kizilcec**, R. F., Bailenson, J. N., & Ju, W. (2016). Social Robots and Virtual Agents as Lecturers for Video Instruction. *Computers in Human Behavior*, 55(B), 1222-1230.

Kizilcec, R. F. & Schneider, E. (2015). Motivation as a Lens to Understand Online Learners. *ACM Transactions on Computer-Human Interaction (TOCHI)*, 22(2).

Kizilcec, R. F., Bailenson, J. N., & Gomez, C. J. (2015). The Instructor's Face in Video Instruction: Evidence from Two Large-Scale Field Studies. *Journal of Educational Psychology*, 107(3), 724-739.

Kizilcec, R. F., Schneider, E., Cohen, G. L., & McFarland, D. A. (2014). Encouraging Forum Participation in Online Courses with Collectivist, Individualist, and Neutral Motivational Framings. *eLearning Papers*, 37, 13-22.

Thille, C., Schneider, D. E., **Kizilcec**, R. F., Piech, C., Halawa, S. A., & Greene, D. K. (2014). The Future of Data-Enriched Assessment. *Research & Practice in Assessment*, 9(2), 5-16.

Aymerich-Franch, L., **Kizilcec**, R. F., & Bailenson, J. N. (2014). The Relationship between Virtual Self Similarity and Social Anxiety. *Frontiers in Human Neuroscience*, 8(944).

Refereed and Published Proceedings

Kizilcec, R. F., Davis, G. M., & Cohen, G. L. (2017). Towards equal opportunities in MOOCs: Affirmation reduces gender & social-class achievement gaps in China. In *Proceedings of the Fourth ACM Conference on Learning at Scale (L@S)*. **Best Paper Award**.

Davis, D., Jivet, I., **Kizilcec**, R. F., Chen, G., Hauff, C., & Houben, G.-J. (2017). Follow the Successful Crowd: Facilitating Social Comparison Raises MOOC Completion Rates. In *Proceedings of the International Conference on Learning Analytics and Knowledge (LAK)*.

Kizilcec, R. F. (2016). How Much Information? Effects of Transparency on Trust in an Algorithmic Interface. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI)*.

Kizilcec, R. F., Perez-Sanagustin, M., & Maldonado, J. J. (2016). Recommending Self-Regulated Learning Strategies Does Not Improve Performance in a MOOC. In *Proceedings of the Third ACM Conference on Learning at Scale (L@S)*.

Kizilcec, R. F., & Halawa, S. A. (2015). Attrition and Achievement Gaps in Online Learning. In *Proceedings of the Second ACM Conference on Learning at Scale (L@S)*.

Krause, M., & **Kizilcec**, R. F. (2015). To Play or not to Play: Response Quality and Task Complexity in Games and Paid Crowdsourcing. In *Proceedings of the AAAI Conference on Human Computation & Crowdsourcing (HCOMP)*.

Kizilcec, R. F., Papadopoulos, K., & Sritanyaratana, L. (2014). Showing Face in Video Instruction: Effects on Information Retention, Visual Attention, and Affect. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI)*.

Williams, J. J., **Kizilcec**, R. F., Klemmer, S., & Russell, D. (2014). Innovations for Learning at Scale Workshop. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI)*.

Zhang, K. & **Kizilcec**, R. F. (2014). Anonymity in Social Media: Effects of Content Controversiality and Social Endorsement on Sharing Behavior. In *Proceedings of the AAAI International Conference on Weblogs and Social Media (ICWSM)*.

Kizilcec, R. F., Piech, C., & Schneider, E. (2013). Deconstructing Disengagement: Analyzing Learner Subpopulations in Massive Open Online Courses. In *Proceedings of the International Conference on Learning Analytics and Knowledge (LAK)*.

Kizilcec, R. F. (2013). Collaborative Learning in Geographically Distributed and In-person Groups. In *Proceedings of the Conference on Artificial Intelligence in Education (AIED)*.

Book Chapters

Kizilcec, R. F. & Brooks, C. (in press). Diverse Big Data and Randomized Field Experiments in Massive Open Online Courses. In G. Siemens & C. Lang (Eds.), *Handbook on Learning Analytics & Educational Data Mining*.

Working Papers

Kizilcec, R. F., Bakshy, E., Eckles, D., & Burke, M., “The Spread of Human Cooperation in an Online Social Network.”

Kizilcec, R. F., Cohen, G. L., & Baiocchi, M., “Power by Design: Improving Replicability with Efficient Experimental Design.”

Kizilcec, R. F., “Identity, Threat, and Belonging in Digital Learning Environments.”

Kim, J., **Kizilcec**, R. F., & Kulkarni, C., “HCI in Online Education.” (review article for publication in *Foundations and Trends in Human-Computer Interaction*)

Awards and Fellowships

2017 Nathan Maccoby Dissertation Award, Stanford University

2017 Best Paper Award, ACM Learning at Scale Conference

2015 Stanford Computational Social Science Fellowship (\$10,000 in research funding)

2014 Stanford Interdisciplinary Graduate Fellowship (Ph.D. funding for 3 years)

2014 SPICE (Student Project for Intellectual Enhancement) grant (\$1,500) for the Stanford Workshop on Questionnaire Design, Stanford Office of the Vice Provost for Graduate Education

2013 Faculty Seed Grant for Innovation in Researching Online Courses (\$7,100), Stanford Vice Provost of Online Learning

2011 Department of Communication Fellowship, Stanford University

2011 UCL Alumni Scholarship, University College London

Invited Talks

- 2017 **Udemy, Inc.**, talk on supporting continued engagement with online learning at scale
- 2017 **Kahn Academy**, talk on supporting continued engagement with online learning at scale
- 2016 **Pontifical Catholic U. of Chile**, talk on social psychological barriers in higher education
- 2016 **Rosetta Stone**, talk on psychological factors in online courses
- 2016 **EdTech Meetup RheinMain**, Germany, talk on online education research
- 2016 **Pratham Symposium**, Stanford, panel on worldwide challenges in education
- 2016 **MediaX Conference**, Stanford, panel on digital augmentation in education
- 2016 **Learning Summit**, Stanford, panel discussion on inclusive learning environments
- 2016 **TU Delft**, the Netherlands, talk on psychological interventions in online learning
- 2016 **Coursera Partners Conference**, the Netherlands, talk on strategies to support active learning in MOOCs
- 2015 **UC Berkeley**, Institute of Design, talk on psychological interventions in online learning
- 2015 **MIT**, xTalk series, talk on psychological interventions in online learning
- 2015 **University of Michigan**, MOOC research summit, talk on psychological causes of achievement gaps in online learning
- 2015 **Coursera, Inc.**, talk on learner motivation, social cues, and achievement gaps in online learning
- 2015 **Digital October Center**, Moscow, Russia, talk on instructional design in MOOCs
- 2014 **MediaX Conference**, Stanford, talk on market segmentation of online interactions based on motivation

Selected Conference Presentations (non-archival only)

- 2016 **BayLearn Conference**, “Psychologically Welcoming Learning Environments”
- 2016 **SPSP**, “Closing the Global Achievement Gap in Online Learning”
- 2015 **CODE@MIT**, “Peer encouragement designs: Estimating peer effects of social feedback”
- 2014 **eMOOCs**, “Encouraging Forum Participation [...] with Motivational Framings”
- 2014 **Learning with MOOCs**, “The Promise of Social Learning & Annotation”

Research Positions

- 2014-15 **Part-time Employee**, Facebook, Core Data Science
Continued research on identifying peer effects of social feedback.
- 2014 **Internship**, Facebook, Core Data Science
Mentors: Eytan Bakshy, Dean Eckles.
Identified peer effects of social feedback with large-scale online experiments and econometric methods. Developed a new class of experiments to estimate peer effects in online experiments: peer encouragement designs.
- 2013 **Internship**, Facebook, Core Data Science
Mentor: Eytan Bakshy.
Traced the spread of human cooperation in a real social network by leveraging a natural experiment of gift giving behavior around people's birthdays.

Teaching and Mentoring

Instruction

- 2016 **Guest Lectures**, Stanford University.
I was invited to lead two sessions in Prof. Thille's Learning Analytics Seminar.
- 2014, 2015 **Teaching Assistant**, Stanford University.
Course title: Online Learning Research Methods.
Instructors: Prof. Candace Thille, Prof. John Mitchell.
- 2014 **Guest Lecture**, George Mason University.
I gave an invited lecture in Prof. Aditya Johri's Learning Analytics course.
- 2014 **Co-Instructor**, Stanford University.
I organized a two-day workshop on questionnaire design for survey research with fellow graduate student Dave Vannette.
- 2010, 2011 **Technology Camp Director**, TIC Summer Camp, McLean, VA. I held teacher-training workshops, designed and supervised programming classes (ages 7 to 16).
- 2009 **Technology Camp Counselor**, TIC Summer Camp, McLean, VA. I taught beginners and intermediate programming and web design to ages 7 to 16.

Research Mentoring

- 2013 Johnny Winston (B.S. student in Symbolic Systems, Stanford University), co-presence cues in online video lectures. Now at Patreon, San Francisco
- 2013 Kathryn Papadopoulos (M.S. student in Symbolic Systems, Stanford University), visual attention and social cues in video lectures. Now at Google, Mountain View.

2013 Lalida Sritanyaratana (community teaching assistant in Stanford HCI course), visual attention and social cues in video lectures. Now at Google, Mountain View.

Professional Services

2017, 2015 **Program Committee Member**, ACM Learning at Scale Conference

2017 **Program Committee Member**, eMOOCs Conference

2017 **Program Committee Member**, Coursera Partners Conference

2016 **Program Committee Member**, Learning with MOOCs Conference

Since 2016 **Reviewer**, Computers & Education

Since 2014 **Reviewer**, ACM Learning @ Scale Conference

Since 2013 **Reviewer**, ACM CHI Human Factors in Computing Systems Conference

2017 **Reviewer**, International Journal of Artificial Intelligence in Education

2017 **Reviewer**, International Conference on Learning Analytics & Knowledge

2016 **Reviewer**, ACM CSCW Conference

2016 **Reviewer**, Psychological Science

2016 **Reviewer**, Oxford University Press

2016 **Reviewer**, IEEE Transactions on Learning Technologies

2016, 2014 **Reviewer**, Journal of Computer Assisted Learning

2015 **Reviewer**, Computers in Human Behavior

2015 **Reviewer**, IEEE Transactions on Signal Processing

2014 **Reviewer**, ACM TOCHI Transactions on Computer-Human Interaction

2014 **Workshop Co-Organizer**, ACM CHI Human Factors in Computing Systems Conference

Employment

Before graduate school, I worked as a web developer for 1.5 years in London. I developed a number of front-end and back-end solutions for a small e-commerce business. This professional experience played an important role in my decision to study communication and conduct research on psychology and human-computer interaction.

Software

QualTurk, a free open source web application to reduce low-quality survey data by dynamically flagging work on Amazon's Mechanical Turk that does not pass screening and timing criteria. The system is available for development and free use: www.github.com/whynotyet/QualTurk; www.QualTurk.com.

Media Coverage

Xinhua News, Exercise devised to boost completion rates of some online learning courses, April 2017

The Australian, Online Primer Fails in Collectivist Cultures, April 2017

EdSurge, Study Finds Tactics to Help Close Global MOOC Achievement Gap, February 2017

The Australian, Welcome effort boosts MOOCs, February 2017

PBS Rewire, 'Taking an Online Course? Writing Out Your Reasons Why Might Help You Finish', January 2017

Inside Higher Ed, A Sense of Belonging on Inside Higher Ed, January 2017

Education Week, Practical Guidance from MOOC Research: Student Diversity, July 2015

BBC, Moocs data offers promise of perfect teaching, October 2013

ACM Tech News, Learning analytics at Stanford takes huge leap forward with MOOCs, April 2013