

I am a researcher in Human-Computer Interaction, Human Factors Engineering and Health Informatics. My primary interest is informing the design of tools that assist in decision making, particularly those that use sophisticated computation. I engage in empirical research and design efforts with a goal of generating new knowledge and theory about computer-supported decision making.

## Education

**2015      PhD, Media and Information Studies**

Michigan State University

Advisor: Rick Wash

Committee: Gary Hsieh, Joshua Introne, Wei Peng, Emilee Rader, Joseph B. Walther

**2010      MSI, Human-Computer Interaction**

University of Michigan

Advisor: Mark Newman

Committee: Stephanie Teasley

**2007      BS, Psychology**

University of Utah

Certificate in Human Factors Engineering

**2007      BA, Russian**

University of Utah

# Positions

## Research Positions

- 2015 - Present    **Postdoctoral Fellow in Decision Sciences**  
University of Michigan Medical School  
Center for Bioethics and Social Sciences in Medicine
- 2010 - 2015    **Graduate Research Assistant**  
Michigan State University  
Behavior, Information, Technology Lab
- 2010    **Research Associate**  
University of Michigan  
Comprehensive Cancer Center
- 2008 - 2009    **Research Associate**  
University of Michigan Medical School  
Open.Michigan
- 2008    **Research Associate**  
University of Michigan Library  
Usability Working Group

## Teaching Position

- 2008 - 2009    **Graduate Student Instructor**  
University of Michigan  
Department of Slavic Languages and Literatures

# Publications

## Theses

- 2015      **Decision Biases in User Agreement with Intelligent Decision Aids**  
Doctoral Dissertation  
Michigan State University
- 2010      **Real-Time Text and IM**  
Master's Thesis  
University of Michigan

## Peer-reviewed publications

**Note.** Proceedings papers in the top HCI conferences such as CHI and CSCW are rigorously peer-reviewed and have the most prestige and impact in the field.

- In Press   p.13      **Graphics Help Patients Distinguish Between Urgent and Non-Urgent Deviations in Laboratory Test Results**  
Brian J. Zikmund-Fisher, Aaron M. Scherer, Holly O. Witteman, **Jacob Solomon**, Nicole L. Exe, Beth A. Tarini, Angela Fagerlin  
Journal of the American Medical Informatics Association
- 2016      p.12      **Heterogeneity in Customization of Recommender Systems Among Users with Homogenous Preferences**  
Jacob Solomon  
Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (CHI) [23% acceptance rate]
- 2016      p.11      **Highly Successful Projects Inhibit Coordination on Crowdfunding Sites**  
Jacob Solomon, Wenjuan Ma, Rick Wash  
Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (CHI) [23% acceptance rate]
- 2016      p.10      **Is This Good or Bad? Redesigning Visual Displays of Medical Test Results in Patient Portals to Provide Context and Meaning**  
Jacob Solomon, Aaron M. Scherer, Nicole L. Exe, Holly O. Witteman, Angela Fagerlin, Brian J. Zikmund-Fisher  
Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems (CHI) [43% acceptance rate]

- 2015 p.9 **Don't Wait! How Timing Affects Coordination of Crowdfunding Donations**  
Jacob Solomon, Wenjuan Ma, Rick Wash  
Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW) [28% acceptance rate]
- 2015 p.8 **Factors Related to Privacy Concerns and Protection Behaviors Regarding Behavioral Advertising**  
Donghee Yvette Wohn, Jacob Solomon, Dan Sarkar, Kami Vaniea  
Proceedings of the 33rd Annual ACM Conference Extended Abstracts on Human Factors in Computing Systems (CHI) [43% acceptance rate]
- 2014 p.7 **Customization Bias in Decision Support Systems**  
Jacob Solomon  
Proceedings of the 32nd Annual ACM Conference on Human Factors in Computing Systems (CHI) [23% acceptance rate]
- 2014 p.6 **Coordinating Donors on Crowdfunding Sites**  
Rick Wash, Jacob Solomon  
Proceedings of the 17th ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW) [27% acceptance rate]  
**Best Paper Honorable Mention**
- 2014 p.5 **Critical Mass of What? Exploring Community Growth of WikiProjects**  
Jacob Solomon, Rick Wash  
Proceedings of the 8th International AAAI Conference on Weblogs and Social Media (ICWSM) [23% acceptance rate]
- 2014 p.4 **Human-*What* Interaction? Understanding User Source Orientation**  
Jacob Solomon, Rick Wash  
Proceedings of Human Factors and Ergonomics Society Annual Meeting 58(1) 422-426  
**Best Paper Nominee**
- 2012 p.3 **Bootstrapping Wikis: Developing Critical Mass in a Fledgling Community by Seeding Content**  
Jacob Solomon, Rick Wash  
Proceedings of the 15th ACM Conference on Computer Supported Cooperative Work [40% acceptance rate]

- 2010 p.2 **Speaking Through Text: The Influence of Real-Time Text on Discourse and Usability in IM**  
Jacob Solomon, Mark Newman, Stephanie Teasley  
Proceedings of the 16th ACM International Conference on Supporting Group Work (GROUP) [36% acceptance rate]
- 2007 p.1 **Digital Photo Kiosk Evaluation**  
Jacob Solomon, Frank A. Drews  
Human Factors and Ergonomics Society Annual Meeting 51(5) 484 - 488

### **Conference Abstracts (lightly peer-reviewed)**

- 2016 c.6 **Improving Understanding of Test Results by Substituting (Not Adding) Goal Ranges**  
Aaron M. Scherer, Holly O. Witteman, Jacob Solomon, Nicole L. Exe, Angela Fagerlin, Brian J. Zikmund-Fisher  
Society for Medical Decision Making Annual North American Meeting
- 2016 c.5 **Providing Harm Anchors in Visual Displays of Test Results Mitigates Patient Concern About Nearly Normal Values**  
Brian J. Zikmund-Fisher, Aaron M. Scherer, Holly O. Witteman, Jacob Solomon, Nicole L. Exe, Angela Fagerlin  
Society for Medical Decision Making Annual North American Meeting
- 2016 c.4 **Understanding and Promoting Shared Decision Making with a Novel Interactive Online Tool**  
Fred Amell, Jacob Solomon, Brian Zikmund-Fisher, Konstantin Boroda, Yaara Zisman Ilani, Caroline Park, Santiago M. Thibaud, Anand D. Jagannath, Frederik Yick, Tina Shah, Taylor Miller, Ramachandra Reddy, Joshua Cho, Michelle Pong, Shey Mukundan, Esther Mizrahi, Ashley Cenicerros, Manaf Assafin, Hamid Lari, Kenny Ye, Darlene Lefrancois  
Society of General Internal Medicine Annual Meeting
- 2016 c.3 **A Novel Interactive Icon-Array Software Improves Comprehension of Absolute Risk in Medical Trainees and Helps Transform a Large Risk Communication Site into a Potent Resource for Shared Decision Making**  
Fred Amell, Jacob Solomon, Brian Zikmund-Fisher, David Newman, Caroline Park, Yaara Zisman-ilani, Konstantin Boroda, Santiago Thibaud, Anand Jagannath, Frederik Yick, Tina Shah, Taylor Miller, Ramachandra Reddy, Joshua Cho, Michelle Pong, Shey Mukundan, Kim Renwick, Esther Mizrahi, Darlene Lefrancois  
4th Annual Lown Institute Conference  
**Audience Choice Award**

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|------|-----|--|
| 2013 | c.2 | <p><b>Flaming, Criticism and Appreciation on Social Media - An Analysis of Discourse on YouTube Videos</b></p> <p>M. Laeeq Khan, Jacob Solomon</p> <p>National Communication Association (NCA)</p>                               |
| 2013 | c.1 | <p><b>Advocacy, Entertainment and News: An Analysis of User Participation on YouTube</b></p> <p>M. Laeeq Khan, Jacob Solomon</p> <p>Association for Education in Journalism and Mass Communication (AEJMC) Annual Conference</p> |

### **Working Papers and Under Review**

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|------|-----|--|
| 2016 | u.2 | <p><b>The Role of User-Created Automations in Personal Health Informatics</b></p> <p>Jacob Solomon</p> <p>Under Review</p> |
| 2011 | u.1 | <p><b>Bots on Wikipedia: An Exploration of Social Influences</b></p> <p>Jacob Solomon</p> <p>Working Paper</p>             |

### **Technical Reports**

- |      |     |  |
|------|-----|--|
| 2010 | r.9 | <p><b>Evaluation of Comprehensive Cancer Center Patient Site</b></p> <p>Jacob Solomon, Ricardo Yi</p> <p>Technical Report for University of Michigan Comprehensive Cancer Center</p> |
| 2009 | r.8 | <p><b>Microsoft OneNote Tagging Comparative Evaluation</b></p> <p>Jonathan Cohen, Umanka Karkada, Jacob Solomon, Janani Sundar</p> <p>Technical Report for Microsoft Corporation</p> |
| 2009 | r.7 | <p><b>Microsoft OneNote Tagging User Survey</b></p> <p>Jonathan Cohen, Umanka Karkada, Jacob Solomon, Janani Sundar</p> <p>Technical Report for Microsoft Corporation</p>            |
| 2009 | r.6 | <p><b>Microsoft OneNote Tagging Usability Testing</b></p> <p>Jonathan Cohen, Umanka Karkada, Jacob Solomon, Janani Sundar</p> <p>Technical Report for Microsoft Corporation</p>      |

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|------|-----|---|
| 2008 | r.5 | <b>OER Usability Analysis</b><br>Jacob Solomon<br>Technical Report for Open.Michigan  |
| 2008 | r.4 | <b>MTagger Usability Testing</b><br>Matthew Schultz, Jacob Solomon<br>Technical Report for University of Michigan Library Usability Working Group                             |
| 2008 | r.3 | <b>MTagger Cognitive Walkthrough and Heuristic</b><br>Jacob Solomon, Matthew Schultz<br>Technical Report for University of Michigan Library Usability Working Group           |
| 2008 | r.2 | <b>MTagger User Interviews</b><br>Matthew Schultz, Jacob Solomon<br>Technical Report for University of Michigan Library Usability Working Group                               |
| 2008 | r.1 | <b>MTagger Guerilla Testing of the Pop-up Tagging Window</b><br>Matthew Schultz, Jacob Solomon<br>Technical Report for University of Michigan Library Usability Working Group |

## Other Contributions

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|------|---|
| 2016 | <b>screeningdecision.com</b><br>Designed and developed a tool with Dr. Sameer Saini of the VA to assist clinicians in deciding when to stop screening patients for colorectal cancer. This tool is available at <a href="http://screeningdecision.com">http://screeningdecision.com</a> |
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## Presentations

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|--------------|--|
|              | Presented papers for publications p.1, p.2, p.3, p.4, p.5, p.6, p.7, p.9, p.11, p.12 at their respective conferences.  |
| Nov 17, 2016 | <b>End-user Control of Intelligent Systems: The Role of Interactivity in Computer-Supported Decision Making</b><br>Brigham Young University Computer Science Colloquium<br>Provo, UT |

- Nov 19, 2015    **Designing the Information Cockpit: The Impact of Customizable Algorithms on Computer-Supported Decision Making**  
Center for Bioethics and Social Sciences in Medicine Seminar  
Ann Arbor, MI
- Apr 25, 2014    **Customization Bias in Decision Support Systems**  
Media and Information Studies Spring Research Symposium  
East Lansing, MI
- Apr 19, 2013    **Crowdfunding Risks and Rules**  
Media and Information Studies Spring Research Symposium  
East Lansing, MI
- Apr 13, 2012    **An Immediacy-Based Model of Source Orientation**  
Media and Information Studies Spring Research Symposium  
East Lansing, MI

## **Awards**

- 2014    **Dissertation Completion Fellowship**  
College of Communication Arts and Sciences, Michigan State University
- 2014    **Outstanding Doctoral Researcher**  
Department of Media and Information Studies, Michigan State University
- 2014    **Best of Symposium Award**  
Media and Information Spring Research Symposium, Michigan State University
- 2013, 2012    **Summer Research Fellowship**  
College of Communication Arts and Sciences, Michigan State University
- 2012, 2010    **Travel Award**  
Department of Telecommunications, Information Studies, and Media, Michigan State University



2009                      **Rakham Graduate Student Research Grant**  
Rackham Graduate School, University of Michigan

## **Teaching**

### **Courses Taught**

Fall 2008,  
Fall 2009                      **Russian 201**  
University of Michigan  
Primary instructor for 3rd semester Russian language course

Winter 2009                      **Russian 202**  
University of Michigan  
Primary instructor for 4th semester Russian language course

Winter 2008                      **Russia Today**  
University of Michigan  
Led discussion sections, graded essays for undergraduate course on contemporary Russian culture and politics

### **Mentoring**

2013, 2014                      **Katie Hoban**  
Mentored REU project on crowdfunding, contributed to papers c.9 and c.11

2012                              **Kyle Safran**  
Mentored REU project on crowdfunding, led to paper c.6

2012                              **Nate Zemanek**  
Mentored NSF Research Experiences for Undergraduates (REU) project on computer security

## Service

2016	<b>Program Committee Associate Chair</b> ACM Conference on Human Factors in Computing Systems (CHI) - Late Breaking Work
2016	<b>CBSSM Professional Development Committee Member</b>
2014-17	<b>Reviewer</b> ACM Conference on Human Factors in Computing Systems (CHI) <a href="#">Excellent Review Acknowledgement 2016</a>
2013, 2015-17	<b>Reviewer</b> ACM Conference on Computer-Supported Cooperative Work (CSCW)
2016	<b>Reviewer</b> Patient Education and Counseling
2011	<b>Reviewer</b> Journal of Computer-Mediated Communication

## Membership

Association for Computing Machinery (ACM)

Human Factors and Ergonomics Society

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