

# Jeff Huang

Assistant Professor  
Computer Science  
Brown University

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## Education

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- 2008 – 2013      **Ph.D. in Information Science**  
**Master of Science, Information Science**  
University of Washington at Seattle
- 2002 – 2007      **Master of Science, Computer Science**  
**Bachelor of Science, Computer Science** with Business Minor  
University of Illinois at Urbana-Champaign

## Conference Papers

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- SleepCoacher: A Personalized Automated Self-Experimentation System for Sleep Recommendations  
UIST 2016, to appear. 20.6% acceptance      Nedyana Daskalova, Danaë Metaxa-Kakavouli  
Adrienne Tran, Nicole Nugent, Julie Boergers, John McGeary, Jeff Huang
- WebGazer: Scalable Webcam Eye Tracking Using User Interactions  
IJCAI 2016, 3839–3845. 25% acceptance      Alexandra Papoutsaki, Patsorn Sangkloy  
James Laskey, Nedyana Daskalova, Jeff Huang, James Hays
- Crowdsourcing from Scratch: A Pragmatic Experiment in Data Collection by Novice Requesters  
HCOMP 2015, 140–149. 30% acceptance, **Best Paper Finalist**      Alexandra Papoutsaki, Hua Guo  
Danae Metaxa-Kakavouli, Connor Gramazio, Jeff Rasley, Wenting Xie, Guan Wang, Jeff Huang
- Masters of Control: Behavioral Patterns of Simultaneous Unit Group Manipulation in StarCraft 2  
CHI 2015, 3711–3720. 23% acceptance      Eddie Yan, Jeff Huang, Gifford Cheung
- A Strategy-Aware Technique for Learning Behaviors from Discrete Human Feedback  
AAAI 2014, 937–943. 28% acceptance      Robert Loftin, James MacGlashan, Bei Peng  
Matthew Taylor, Michael Littman, Jeff Huang, David Roberts
- Mastering the Art of War: How Patterns of Gameplay Influence Skill in Halo  
CHI 2013, 695–704. 20% acceptance, **Best Paper Finalist**      Jeff Huang, Thomas Zimmermann,  
Nachiappan Nagappan, Charles Harrison, Bruce Phillips
- RevMiner: An Extractive Interface for Navigating Reviews on a Smartphone  
UIST 2012, 3–12. 21.5% acceptance      Jeff Huang, Oren Etzioni, Luke Zettlemoyer, Kevin Clark, Christian Lee
- Improving Searcher Models Using Mouse Cursor Activity  
SIGIR 2012, 195–204. 20% acceptance      Jeff Huang, Ryen White, Georg Buscher, Kuansan Wang
- User See, User Point: Gaze and Cursor Alignment in Web Search  
CHI 2012, 1341–1350. 23% acceptance      Jeff Huang, Ryen White, Georg Buscher
- No Search Result Left Behind: Branching Behavior with Browser Tabs  
WSDM 2012, 203–212. 20.7% acceptance      Jeff Huang, Thomas Lin, Ryen White
- Large-Scale Analysis of Individual and Task Differences in Search Result Page Examination Strategies  
WSDM 2012, 373–382. 20.7% acceptance      Georg Buscher, Ryen White, Susan Dumais, Jeff Huang

- Remix and Play: Lessons from Rule Variants in Texas Hold'em and Halo 2  
CSCW 2012, 559–586. 39% acceptance (revise & resubmit process) Gifford Cheung, Jeff Huang
- Interactive Search Support for Difficult Web Queries  
ECIR 2012, 37–49. 21% acceptance Abdigani Diriye, Giridhar Kumaran, Jeff Huang
- No Clicks, No Problem: Using Cursor Movements to Understand and Improve Search  
CHI 2011, 1225–1234. 26% acceptance, **Best Paper Finalist** Jeff Huang, Ryen White, Susan Dumais
- Starcraft from the Stands: Understanding the Game Spectator  
CHI 2011, 763–772. 26% acceptance Gifford Cheung, Jeff Huang
- Optimal Strategies for Reviewing Search Results  
AAAI 2010, 1321–1326. 26.9% acceptance Jeff Huang, Anna Kazeykina
- Assessing the Scenic Route: Measuring the Value of Search Trails in Web Logs  
SIGIR 2010, 587–594. 16.7% acceptance, **Best Paper Award** Ryen White, Jeff Huang
- Studying Trailfinding Algorithms for Enhanced Web Search  
SIGIR 2010, 443–450. 16.7% acceptance Adish Singla, Ryen White, Jeff Huang
- Conversational Tagging in Twitter  
Hypertext 2010, 173–177. 35% acceptance Jeff Huang, Katherine Thornton, Efthimis Efthimiadis
- Parallel Browsing Behavior on the Web  
Hypertext 2010, 13–17. 35% acceptance Jeff Huang, Ryen White
- Analyzing and Evaluating Query Reformulation Strategies in Web Search Logs  
CIKM 2009, 77–86. 14.5% acceptance, **Best Student Paper Finalist** Jeff Huang, Efthimis Efthimiadis
- Graphstract: Minimal Graphical Help for Computers  
UIST 2007, 203–212. 17% acceptance Jeff Huang, Michael Twidale

## Journal Papers

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- Master Maker: Understanding Gaming Skill through Practice and Habit from Gameplay Behavior  
Topics in Cognitive Science (to appear) Jeff Huang, Eddie Yan, Gifford Cheung  
Nachiappan Nagappan, Thomas Zimmerman
- Strokes of Insight: User Intent Detection and Kinematic Compression of Mouse Cursor Trails  
Information Processing & Management (to appear). Daniel Martín-Albo, Luis Leiva  
Jeff Huang, Réjean Plamondon
- Learning Behaviors via Human-Delivered Discrete Feedback  
Journal of Autonomous Agents and Multi-Agent Systems (2016), 30(1), 30–59. Robert Loftin, Bei Peng  
James MacGlashan, Michael Littman, Matthew Taylor, Jeff Huang, David Roberts
- Representing Uncertainty in Graph Edges: An Evaluation of Paired Visual Variables  
Transactions on Visualization and Computer Graphics (2015), 21(10), 1173–1186. Hua Guo, Jeff Huang  
David Laidlaw
- Building a Better Mousetrap: Compressing Mouse Cursor Activity for Web Analytics  
Information Processing & Management (2015), 51(2), 114–129. Luia A. Leiva, Jeff Huang

## Other Publications

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### Gameplay Data Plays Nicer When Divided into Cohorts

Chapter in Perspectives on Data Science for Software Engineering (2016), Morgan Kaufmann      Jeff Huang

### Understanding the Role of Social Environment and Early Symptoms of PTSD in Adolescents Following Physical Trauma

American College of Physicians National Meeting 2016      Anjali Chandra, Megan Ranney, Jeff Huang  
Thomas Chun, Anthony Spirito, Susan Duffy, Nicole Nugent

### Learning Something from Nothing: Leveraging Implicit Human Feedback Strategies

RO-MAN 2014      Robert Loftin, Bei Peng, James MacGlashan  
Michael Littman, Matthew Taylor, Jeff Huang, David Roberts

### Influence of Gameplay on Skill in Halo Reach

CHI Games User Research Workshop 2013      Jeff Huang, Thomas Zimmermann,  
Nachiappan Nagappan, Charles Harrison, Bruce Phillips

### Web User Interaction Mining from Touch-Enabled Mobile Devices

HCIR Workshop 2012      Jeff Huang, Abdigani Diriye

### On the Value of Page-Level Interactions in Web Search

HCIR Workshop 2011      Jeff Huang

### Studying Query Reformulation Strategies in Search Logs

ASIS&T 2009 Poster Paper      Jeff Huang, Efthimis Efthimiadis

### Query Formulation in Web Search

ASIS&T 2009 Panel      Efthimis Efthimiadis, Jeff Huang, Amanda Spink, Jim Jansen

### Mystery Meat revisited: Spam, Anti-Spam Measures and Digital Redlining

Webology 5(1), 2007      Christopher Lueg, Jeff Huang, Michael Twidale

### Mystery Meat: Where does spam come from, and why does it matter?

EICAR 2006, 150–163      Christopher Lueg, Jeff Huang, Michael Twidale

### Graphical Abstract Help

CHINZ 2005, 83–89      Jeff Huang, Bo Lu, Michael Twidale

## Awards

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NSF CAREER Award 2016

HCOMP 2015 Best Paper Finalist

Facebook Graduate Fellowship 2012–2013 *“Mining Richer Interactions from Web Users”*

CHI 2013 Best Paper Finalist (top 5% of submitted papers)

CHI 2011 Best Paper Finalist (top 5% of submitted papers)

SIGIR 2010 Best Paper Award (top 1 of 520 submitted papers)

CIKM 2009 Best Student Paper Finalist

## Grants

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NSF CAREER Award 2016. *Modeling User Touch and Motion Behaviors for Adaptive Interfaces in Mobile Devices*. Sole PI.

NIH R01 2016. *Understanding the Interplay of Social Context and Physiology on Psychological Outcomes in Trauma-Exposed Adolescents*. Co-I, with Nicole Nugent.

NIH R21 2016. *Bullying Prevention Intervention for Adolescent Primary Care Patients*. Co-I with Megan Ranney.

NIH Administrative Supplement 2016. *Biomarkers, Social and Affective Predictors of Suicidal Thoughts and Behaviors in Adolescents*. Co-I, with Nicole Nugent.

NSF CRII 2015. *Scalable Webcam Eyetracking by Learning from User Interactions*. Sole PI.

Salomon Award 2015. *Learning Eye Tracking Through User Interactions on Mobile Devices*. Sole PI.

Google Research Award 2012. *Cursor Mining in Web Search*. Co-PI, with Jacob Wobbrock.

Microryza Crowdfunding 2012. *How do spammers harvest your e-mail address?*. Sole PI.

## Industry Positions

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2009 – 2012	<b>Microsoft</b> Research	4-Time Research Intern
2010 – 2011	<b>World Blender</b> (Techstars-funded startup)	Co-Founder
2010	<b>Google</b> Ad Planner	Software Engineer Intern
2007 – 2009	<b>Yahoo</b> Cloud Computing	Senior Software Engineer
2006	<b>Google</b> AdSpam	Software Engineer Intern
2004 – 2005	<b>Microsoft</b> Project	2-Time Software Engineer Intern
2003 – 2004	<b>Microsoft</b> University Relations	Student Consultant
2002 – 2003	<b>Motorola</b> GSM	2-Time System Test Intern

## Teaching Positions

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2016	<b>Brown University</b> Computer Science Graduate-level Personal Informatics seminar	Instructor
2014 – 2015	<b>Brown University</b> Computer Science Graduate-level Human-Computer Interaction seminar	Instructor
2013 – 2016	<b>Brown University</b> Computer Science Undergraduate-level User Interface course	Instructor
2010	<b>University of Washington</b> Information School Graduate-level Information Retrieval course	Co-Instructor
2008 – 2010	<b>University of Washington</b> Information School Masters & undergrad classes: HCI, Databases, Information Retrieval, and others	Teaching Assistant
2006	<b>University of Illinois</b> Computer Science Two Undergraduate-level CS 101 labs (C & Matlab on Linux)	Teaching Assistant

## Professional Service

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**Program Committee:** CHIIR 2017 & 2016, CHI 2016, SIGIR 2016 & 2010, WWW 2015 & 2013 & 2011, SIGIR Best Paper Award Committee 2015, ICWSM Posters 2011, SIGIR Posters 2009,

**Conference Reviewer:** UIST 2015, CHI 2015, CHI 2014, CSCW 2014, IUI 2013, CHI 2013, CHI 2013 Posters, HCIR 2011, HICSS 2011, InfoVis 2011, CIKM 2009, ECIR 2009

**Journal Reviewer:** ACM Transactions on the Web (TWEB), Journal of the American Society for Information Science and Technology (JASIST), ACM Transactions on Knowledge and Data Engineering (TKDE), Topics of Cognitive Science (TociCS), Transactions of Information Systems (ToIS), International Journal of Human-Computer Interaction (IJHCI)

**Conference Local Chair:** WSDM 2012

**Student Volunteer:** WWW 2012, CHI 2012 & 2007, CSCW 2012, AoIR 2011, AAAI 2010, ASIST 2009