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Informatics East 360
Department of Informatics
Indiana University Bloomington
Bloomington, IN 47408-3912

RESEARCH INTERESTS

My research focuses on the study of sociotechnical systems and mechanisms to enhance physical and mental wellbeing and to facilitate civic engagement and environmental stewardship. I utilize mixed methods approaches to tackle research problems in online and geographic communities. Specifically, my current research focuses on leveraging the awareness of individual and community activities embedded in sensor technologies, smart devices, social media, and online forums in the design, prototyping, and deployment of novel personal informatics interfaces and civic engagement platforms.

EDUCATION

Ph.D. Information and Computer Science	University of California, Irvine	2006 – 2011
M.S. Information Networking	Carnegie Mellon University	2003 – 2005
B.S. Computer Science and Engineering (cum laude)	University of California, Los Angeles	2000 – 2003

EXPERIENCE**Indiana University Bloomington**

Assistant Professor, Department of Informatics	Since 2016
Part-time Assistant Professor, University Studies, DePauw University	
Director, Societal Computing Lab (SOCO)	Since 2015
Affiliated Faculty, Department of Information and Library Science	
Affiliated Faculty, Center for the Integrative Study of Animal Behavior (CISAB)	
Affiliated Faculty, Indiana University Network Science Institute (IUNI)	
Affiliated Faculty, Center of Excellence for Women in Technology (CEWiT)	
Affiliated Faculty, Institute for Software Research (ISR), University of California, Irvine	
Fellow, Center for Computer-Mediated Communication (CCMC)	
Fellow, Minority Serving Institution Faculty Research Development Institute (MSI)	
Fellow, National Center for Faculty Development & Diversity (NCFDD)	
Fellow, Consortium for the Science of Sociotechnical Systems (CSST)	Summer 2016
Assistant Professor, Department of Information and Library Science	2015 – 2016

The Pennsylvania State University

Research Associate and Lecturer (Graduate Faculty), College of Information Sciences and Technology	2012 – 2015
Affiliated Faculty, Center for Human-Computer Interaction	

Microsoft Research

Research Intern, Visualization and Interaction for Business and Entertainment (VIBE) Group, Redmond, WA	Summer 2010
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IBM Research

Research Intern, User Systems and Experience Research (USER) Group, San Jose, CA	Summer-Fall 2008
Extreme Blue Intern, Component Systems Group, San Jose, CA	Summer 2007
Research Developer, User Systems and Experience Research (USER) Group, San Jose, CA	2006
WBI Tools Developer & Performance Analyst, Websphere Business Integration Performance and Development Division, Austin, TX	Summer-Fall 2005
Extreme Blue Intern, User Systems and Experience Research (USER) Group, San Jose, CA	Spring 2005
Software Developer Intern—Test Tool Development, Printing Systems Division, Boulder, CO	Summer 2004

MSC.Software

Mainframe Systems Intern, High Performance Computing Division, Santa Ana, CA	Summer 2002
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FUNDING

External Grants

- [EG.6] Templeton World Charity Foundation. 2018-2019. Teaching in wild New Caledonian Crows. PI: Natalie Uomini; Co-PI: **Patrick C. Shih**. \$41,000.
- [EG.5] Andrew W. Mellon Foundation Faculty Fellowship 2016-2017. *Understanding cross-cultural differences of crowd work in U.S., Taiwan, and China*. PI: **Patrick C. Shih**. \$20,000.
- [EG.4] U.S. National Park Service. 2015-2016. *Population monitoring, seasonal activity, and landscape movements of little brown myotis (*Myotis lucifugus*) in Yellowstone National Park*. PI: John Treanor; Co-PIs: Joe Johnson, Jessica Kropczynski, & **Patrick C. Shih**. \$60,000.
- [EG.3] Yellowstone Park Foundation. 2015-2016. *Bat ecology and movements in Yellowstone National Park*. PI: John Treanor; Co-PIs: Joe Johnson, Jessica Kropczynski, & **Patrick C. Shih**. \$50,000.
- [EG.2] Bloomberg Financial Products UX Research Awards. 2015-2016. *End-user configurable tools for integrating discussions of trending financial news*. PI: John M. Carroll; Co-PI: **Patrick C. Shih**. \$135,000.
- [EG.1] Next Century Corporation Technology Innovation Grant. 2014-2015). PI: **Patrick C. Shih**. \$2,000.

Internal Grants

- [IG.8] IUB Groups STEM Summer Research Experience Program. 2017. *Perception of Smart Dog Technologies in Domestic Settings*. PI: **Patrick C. Shih**. \$2,000.
- [IG.7] IUB Collaborative Research and Creative Activity Funding Award. 2017-2018. *Just Like Me”: Stories from All Sides of the Vietnam War*. PI: **Patrick C. Shih**. \$20,000.
- [IG.6] IUB Groups STEM Summer Research Experience Program. 2016. *Impact of initial trust on video-mediated social support*. PI: **Patrick C. Shih**. \$1,000.
- [IG.5] Penn State Center for Online Innovation in Learning Research Initiation Grant. 2015-2016. *Occupy MOOCs: Understanding and designing for actual student motivations and activities in MOOCs*. PI: John M. Carroll; Co-PIs: Mary Beth Rosson, & **Patrick C. Shih**. \$49,082.
- [IG.4] Penn State Schreyer Institute for Teaching Excellence Teaching Project Grant. 2014-2015. *Supporting Technology Augmented Rhetoric (STAR)*. PI: **Patrick C. Shih**; Co-PI: Jessica Kropczynski. \$5,000.
- [IG.3] Penn State Summer Undergraduate Research Fellowship. 2014). *Using Smartphones as sensing infrastructure at large festivals*. PI: **Patrick C. Shih**. \$1,000.
- [IG.2] Penn State Center for Online Innovation in Learning Research Initiation Grant. 2013-2014. *Supporting Dialectical Learning with Piazza*. PI: John M. Carroll; Co-PI: **Patrick C. Shih**. \$42,000.
- [IG.1] Penn State Summer Undergraduate Research Fellowship. 2013. *Supporting dialectical learning with Piazza*. PI: **Patrick C. Shih**. \$1,000.

HONORS AND AWARDS

European Exhibition of Creativity and Innovation Conference (Euroinvent) Silver Medal Award [B.2]	2017
ACM CHI Special Recognitions for Exceptional Reviews	2017
IU Office of Mentoring Services & Leadership Development Award	2017
ACM CSCW Special Recognitions for Exceptional Reviews	2016
Consortium for the Science of Sociotechnical Systems (CSST) Fellowship	2016
ACM CHI Best Paper Honorable Mention Award (top 5%) [C.15]	2015
iConference Best Paper Award Nomination (top 3%) [C.14]	2015
1000 Pitches Summit finalist in “Mobile Apps” category (top 9 out of 1083)	2014
ACM CHI Best Paper Honorable Mention Award (top 5%) [C.8]	2014
DoED Graduate Assistance in Areas of National Need (GAANN) Fellowship	2008 – 2010
UC Irvine Chancellor’s Fellowship	2006 – 2010
IBM Service Science, Management and Engineering (SSME) Certificate	2007
CMU Best Teaching Assistant Award Nomination	2004 – 2005
CMU Information Networking Institute Scholarship	2003 – 2005
Golden Key International Honour Society	2003
UCLA Paul Sandager Alumni Scholarship	2002
UCLA University Scholarship	2002
Eta Kappa Nu International Electrical and Computer Engineering Honor Society	2001
Tau Beta Pi National Engineering Honor Society	2001
UCLA Dean’s Honor List	2001
Stanford National Invitational Congress Debate Finalist	1999
US FIRST Robotic Team Award	1998

PUBLICATIONS

Google Scholar: https://scholar.google.com/citations?hl=en&user=Lzw8EnkAAAAJ&pagesize=100&view_op=list_works

ResearchGate: https://www.researchgate.net/profile/Patrick_Shih

Journal Papers

- [J.13] Shengnan Yang, Pei-Ying Chen, **Patrick C. Shih**, Jeffrey Bardzell, and Shaowen Bardzell. 2017. Cross-Strait Frenemies: Chinese Netizens VPN in to Facebook Taiwan. *Proceedings of the ACM on Human-Computer Interaction* 1, 2 Article 115 (Nov. 2017), 22 pages.
- [J.12] John M. Carroll, **Patrick C. Shih**, Kyungsik Han, and Jessica Kropczynski. 2017. Coordinating community cooperation: Integrating timebanks and nonprofit volunteering by design. *International Journal of Design* 11, 1 (Apr. 2017), 51-63. ISSN: 1991-3761.
- [J.11] Jonathan K. Nelson and **Patrick C. Shih**. 2017. CompanionViz: Mediated platform for gauging canine health and enhancing human-pet interactions. *International Journal of Human-Computer Studies* 98 (Feb. 2017), 169-178. <http://dx.doi.org/10.1016/j.ijhcs.2016.04.002>
- [J.10] Chase McCoy and **Patrick C. Shih**. 2016. Teachers as producers of data analytics: A case study of a teacher-focused educational data science program. *Journal of Learning Analytics* 3, 3 (Dec. 2016), 193-214. <http://dx.doi.org/10.18608/jla.2016.33.10>
- [J.9] Kyungsik Han, **Patrick C. Shih**, Mary Beth Rosson, and John M. Carroll. 2016. Understanding local community attachment, engagement and social supported networks mediated by mobile technology. *Interacting with Computers* 28, 3 (May 2016), 220-237. <http://dx.doi.org/10.1093/iwc/iwu040>
- [J.8] John M. Carroll, Yu Wu, **Patrick C. Shih**, and Saijing Zheng. 2016. Re-appropriating a Question/Answer system to support dialectical constructivist learning activity. *Educational Technology Research and Development* 64, 1 (Feb. 2016), 137-156. <http://dx.doi.org/10.1007/s11423-015-9405-6>
- [J.7] Jing Wang, **Patrick C. Shih**, Yu Wu, and John M. Carroll. 2015. Comparative case studies of open source software peer review processes. *Information and Software Technology* 67 (Nov. 2015), 1-12. <http://dx.doi.org/10.1016/j.infsof.2015.06.002>
- [J.6] **Shih., P. C.**, Kyungsik Han, and John M. Carroll. 2015. Using social multimedia content to inform emergency planning and management of recurring and cyclical events in local communities. *Journal of Homeland Security and Emergency Management* 12, 3 (Sep. 2015), 627-652. <http://dx.doi.org/10.1515/jhsem-2014-0071>
- [J.5] Jing Wang, **Patrick C. Shih**, and John M. Carroll. 2015. Life after weight loss: Design implications for community-based long-term weight management. *Computer Supported Cooperative Work* 24, 4 (Aug. 2015), 353-384. <http://dx.doi.org/10.1007/s10606-015-9226-5>
- [J.4] John M. Carroll, **Patrick C. Shih**, and Jessica Kropczynski. 2015. Community informatics as innovation in sociotechnical infrastructures. *Journal of Community Informatics* 11, 2 (Jun. 2015), 17 pages. ISSN: 1712-4441.
- [J.3] Kyungsik Han, **Patrick C. Shih**, Victoria Bellotti, and John M. Carroll. 2015. It's time there was an app for that too: A usability study of mobile timebanking. *International Journal of Mobile Human-Computer Interaction* 7, 2 (Jun. 2015), 1-22. <http://dx.doi.org/10.4018/ijmhci.2015040101>
- [J.2] Jing Wang, **Patrick C. Shih**, and John M. Carroll. 2015. Revisiting Linus's Law: Benefits and challenges of open source software peer review. *International Journal of Human-Computer Studies* 77 (May 2015), 52-65. <http://dx.doi.org/10.1016/j.ijhcs.2015.01.005>
- [J.1] Kyungsik Han, **Patrick C. Shih**, and John M. Carroll. 2014. Local News Chatter: Augmenting community news by aggregating hyperlocal microblog content in a tag cloud. *International Journal of Human-Computer Interaction* 30, 12 (Sep. 2014), 1003-1014. <http://dx.doi.org/10.1080/10447318.2014.925773>

Conference Papers

- [C.23] Juan Fernando Maestre and **Patrick C. Shih**. 2017. Impact of Initial Trust on Video-Mediated Social Support. In *Proceedings of the Australian Conference on Computer-Human Interaction (OZCHI '17)*. ACM Press.
- [C.22] Gege Gao, Aehong Min, and **Patrick C. Shih**. 2017. Gendered Design Bias: Gender Differences of In-Game Character Choice and Playing Style in League of Legends. In *Proceedings of the Australian Conference on Computer-Human Interaction (OZCHI '17)*. ACM Press.
- [C.21] Jeremiah Parry-Hill, **Patrick C. Shih**, Jennifer Mankoff, and Daniel Ashbrook. 2017. Bridging Between Volunteers and Clinicians: Challenges and Opportunities of Distributed DIY-AT. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '17)*. ACM Press, 6184-6194. (25% acceptance rate).
- [C.20] Xianghua Ding, **Patrick C. Shih**, and Ning Gu. 2017. Socially embedded work: A study of wheelchair users performing online work in China. In *Proceedings of the ACM Conference on Computer Supported Cooperative Work & Social Computing (CSCW '17)*. ACM Press, 642-654. (35% acceptance rate).
- [C.19] Jin Y. Jang, Kyungsik Han, Dongwon Lee, Haiyan Jia, and **Patrick C. Shih**. 2016. Teens engage more with fewer photos: Temporal and comparative analysis on behaviors in Instagram. In *Proceedings of the ACM Conference on Hypertext and Social Media (HT '16)*. ACM Press, 71-81. (30% acceptance rate).
- [C.18] Joslenne Pena, **Patrick C. Shih**, and Mary Beth Rosson. 2016. Scenario-based design of technology to support teaching in inverted classes. In *Proceedings of the iConference (iConf '16)*. iSchools, 1-10. (30% acceptance rate).
- [C.17] **Patrick C. Shih**, Kyungsik Han, and John M. Carroll. 2015. Engaging community members with digitally curated social media content at an arts festival: A case study about leveraging crowd-sourcing for community heritage curation. In *Proceedings of the Digital Heritage International Congress (DH '15)*. IEEE Press, 321-324. (57% acceptance rate).
- [C.16] Jin Y. Jang, Kyungsik Han, **Patrick C. Shih**, and Dongwon Lee. 2015. Generation Like: Comparative characteristics in Instagram. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '15)*. ACM Press, 4039-4042. (23% acceptance rate).

- [C.15] **Patrick C. Shih**, Victoria Bellotti, Kyungsik Han, and John M. Carroll. 2015. Unequal time for unequal value: Implications of differing motivations for participation in timebanking. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '15)*. ACM Press, 1075-1084. (23% acceptance rate). **[Best Paper Honorable Mention Award (top 5%)]**
- [C.14] **Patrick C. Shih**, Kyungsik Han, Erika S. Poole, Mary Beth Rosson, and John M. Carroll. 2015. Use and adoption challenges of wearable activity trackers. In *Proceedings of the iConference (iConf '15)*. iSchools, 1-12. (36% acceptance rate). **[Best Paper Award Nomination (top 3%)]**
- [C.13] Saijing Zheng, Mary Beth Rosson, **Patrick C. Shih**, and John M. Carroll. 2015. Understanding student motivation, behaviors and perceptions in MOOCs. In *Proceedings of the ACM Conference on Computer Supported Cooperative Work & Social Computing (CSCW '15)*. ACM Press, 1882-1895. (28% acceptance rate)
- [C.12] **Patrick C. Shih**, Kyungsik Han, and John M. Carroll. 2014. Community Poll: Externalizing public sentiments in social media in a local community context. In *Proceedings of the AAAI Conference on Human Computation & Crowdsourcing (HCOMP '14)*. AAAI Press, 201-209. (32% acceptance rate)
- [C.11] Yu Wu, **Patrick C. Shih**, and John M. Carroll. 2014. Design for supporting dialectical constructivist learning activities. In *Proceedings of the International Conference on Education and New Learning Technologies (EDULEARN '14)*. IATED, 4156-4164.
- [C.10] Kyle Williams, Lichi Li, Madian Khabisa, Jian Wu, **Patrick C. Shih**, and C. Lee Giles. 2014. A web service for scholarly big data information extraction. In *Proceedings of the IEEE International Conference on Web Services (ICWS '14)*. IEEE Press, 105-112. 20% acceptance rate).
- [C.9] **Patrick C. Shih**, Kyungsik Han, and John M. Carroll. 2014. Community Incident Chatter: Informing local incidents by aggregating local news and social media content. In *Proceedings of the International Conference on Information Systems for Crisis Response and Management (ISCRAM '14)*. ISCRAM Association, 772-776. (56% acceptance rate).
- [C.8] Victoria Bellotti, Sara Cambridge, Karen Hoy, **Patrick C. Shih**, Lisa R. Handalian, Kyungsik Han, and John M. Carroll. 2014. Towards community-centered support for peer-to-peer service exchange: Rethinking the timebanking metaphor. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '15)*. ACM Press, 2975-2984. **[Best Paper Honorable Mention Award (top 5%)]** (23% acceptance rate).
- [C.7] Kyungsik Han, **Patrick C. Shih**, Mary Beth Rosson, and John M. Carroll. 2014. Enhancing community awareness and participation to local heritage with a mobile application. In *Proceedings of the ACM Conference on Computer Supported Cooperative Work & Social Computing (CSCW '14)*. ACM Press, 1144-1155. (27% acceptance rate).
- [C.6] Jana Schumann, **Patrick C. Shih**, David F. Redmiles, and Graham Horton. 2012. Supporting initial trust in distributed idea generation and idea evaluation. In *Proceedings of the ACM Conference on Supporting Group Work (GROUP '12)*. ACM Press, 199-208. (37% acceptance rate).
- [C.5] Benjamin Koehne*, **Patrick C. Shih***, and Judith S. Olson. 2012. Remote and alone: Coping with being the remote member on the team. In *Proceedings of the ACM Conference on Computer Supported Cooperative Work (CSCW '12)*. ACM Press, 1257-1266. (40% acceptance rate). **[* These authors contributed equally to this work and are listed in alphabetical order]**
- [C.4] Norman M. Su and **Patrick C. Shih**. 2011. Virtual spectating: Hearing beyond the video arcade. In *Proceedings of the British Computer Society Conference on Human-Computer Interaction (BCS-HCI '11)*. ACM Press, 269-278. (29% acceptance rate)
- [C.3] **Patrick C. Shih**, Gina Venolia, and Gary M. Olson. 2011. Brainstorming Under Constraints: Why Software Developers Brainstorm in Groups. In *Proceedings of the British Computer Society Conference on Human-Computer Interaction (BCS-HCI '11)*. ACM Press, 74-83. (29% acceptance rate).
- [C.2] Leslie S. Liu, **Patrick C. Shih**, and Gillian R. Hayes. 2011. Barriers to the adoption and use of personal health record systems. In *Proceedings of the iConference (iConf '11)*. ACM Press, 363-370. (32% acceptance rate).
- [C.1] **Patrick C. Shih**, David H. Nguyen, Sen H. Hirano, David F. Redmiles, and Gillian R. Hayes. 2009. GroupMind: Supporting brainstorming through a collaborative mind-mapping tool. In *Proceedings of the ACM Conference on Supporting Group Work (GROUP '09)*. ACM Press, 139-148. (36% acceptance rate).

Book Chapters

- [B.3] John M. Carroll, **Patrick C. Shih**, Jessica Kropczynski, Guoray Ca, G., Mary Beth Rosson, and Kyungsik Han. 2017. The Internet of places at community-scale: Design scenarios for hyperlocal neighborhood. In *Enriching Urban Spaces with Ambient Computing, the Internet of Things, and Smart City Design*, Shin'ichi Konomi and George Roussos (Eds.). IGI Global, 1-24.
- [B.2] Joslenne Pena, **Patrick C. Shih**, and Mary Beth Rosson. 2016. Instructors as end-user developers: Technology usage opportunities in the inverted classroom. In *Handbook of Applied Learning Theory and Design in Modern Education*, Elena Railean, Gabriela Walker, Atilla Elçi, and Liz Jackson (Eds.). IGI Global, 560-571. **[European Exhibition of Creativity and Innovation Conference (Euroinvent) Diploma and Silver Medal Award]**
- [B.1] John M. Carroll, **Patrick C. Shih**, Blane Hoffman, Jing Wang, and Kyungsik Han. 2014. Presence and hyperpresence: Implications for community awareness. In *Interacting with Presence: HCI and the Sense of Presence in Computer-Mediated Environments*, Giuseppe Riva, John Waterworth, and Dianne Murray (Eds.). De Gruyter Open, 70-82.

Extended Abstracts and Work-in-Progress Papers with Proceedings (Peer-Reviewed)

- [E.4] Saijing Zheng, Mary Beth Rosson, **Patrick C. Shih**, and John M. Carroll. 2015. Designing MOOCs as interactive places for collaborative learning. In *Proceedings of the ACM Conference on Learning @ Scale (L@S '15)*. ACM Press, 343-346.
- [E.3] Yu Wu, Jessica Kropczynski, **Shih., P. C.**, and John M. Carroll. 2014. Exploring the ecosystem of software developers on Github and other platforms. In *Proceedings of the Companion Publication of the ACM Conference on Computer Supported Cooperative Work & Social Computing (CSCW Companion '14)*. ACM Press, 265-268.

- [E.2] Kyungsik Han, **Patrick C. Shih**, and John M. Carroll. 2013. Aggregating community information to explore social connections. In *Proceedings of the AAAI Conference on Weblogs and Social Media: When the City Meets the Citizen Workshop (ICWSM '13)*. AAAI Press, 5-8.
- [E.1] Bill Tomlinson, Joel Ross, Paul Andre, Eric P. S. Baumer, Donald J. Patterson, Joseph Corneli, Martin Mahaux, Syavash Nobarany, Marco Lazzari, Birgit Penzenstadler, Andrew W. Torrance, David J. Callele, Gary M. Olson, M. Six Silberman, Marcus Stünder, Fabio R. Palamedi, Albert A. Salah, Eric Morrill, Xavier Franch, Florian F. Mueller, Joseph Kaye, Rebecca W. Black, Marisa L. Cohn, **Patrick C. Shih**, Johanna Brewer, Nitesh Goyal, Pirjo Näkki, Jeff Huang, Nilufar Baghaei, and Craig Saper. 2012. Massively distributed authorship of academic papers. In *Proceedings of the Extended Abstracts of the ACM Conference on Human Factors in Computing Systems (CHI EA '12)*. ACM Press, 11-20. (45% acceptance rate)

Workshop, Posters, and Demos without Proceedings (Lightly Peer-Reviewed)

- [W.10] Aehong Min and **Patrick C. Shih**. 2017. Exploring New Design Factors for Electronic Interventions to Prevent College Students from Excessive Drinking by Using Personal Breathalyzers. Workshop on Interactive Systems in Health Care (WISH '17).
- [W.9] Anna N. Baglione, Maxine M. Girard, Meagan Price, James Clawson, and **Patrick C. Shih**. 2017. Mobile Technologies for Grief Support: Prototyping an Application to Support the Bereaved. Workshop on Interactive Systems in Health Care (WISH '17).
- [W.8] Julia C. Dunbar, Ciabhan L. Connelly, Juan F. Maestre, Haley MacLeod, Katie Siek, and **Patrick C. Shih**. 2017. Considerations for Using the Asynchronous Remote Communities (ARC) Method in Health Informatics Research. Workshop on Interactive Systems in Health Care (WISH '17).
- [W.7] Tom Ongwere, Gabrielle Cantor, Sergio Ramirez Martin, **Patrick C. Shih**, James Clawson, and Kay Connelly. 2017. Too Many Conditions, Too Little Time: Designing Technological Intervention for Patients with Type-2 Diabetes and Discordant Chronic Comorbidities. Workshop on Interactive Systems in Health Care (WISH '17).
- [W.6] Lee Hiler, Brook Foulk, Christena Nippert-Eng, and **Patrick C. Shih**. 2017. Detecting Biological Samples Using Olfactory Sensors. Poster presented at the *Animal Behavior Conference*.
- [W.5] Kyungsik Han, Kristin Cook, and **Patrick C. Shih**. 2016. Exploring effective decision making through human-centered and computational intelligence methods. Poster presented at the *ACM Conference on Human Factors in Computing: Workshop on Human Centered Machine Learning (CHI '16)*.
- [W.4] **Patrick C. Shih** and Christena Nippert-Eng (2016, May). From Quantified Self to Quantified Other: Engaging the public on promoting animal well-being. *ACM Conference on Human Factors in Computing: Workshop on HCI Goes to the Zoo (CHI '16)*.
- [W.3] Sarah-Alice Hanna, Jessica Kropczynski, **Shih., P. C.**, and John M. Carroll. 2015. Using a mobile application to encourage community interactions at a local event. Poster presented at the *ACM Richard Tapia Celebration of Diversity in Computing Conference (TAPIA '15)*.
- [W.2] Kyungsik Han, **Patrick C. Shih**, Victoria Bellotti, and John M. Carroll. 2014. Timebanking with a smartphone application. Poster and demo presented at the *Collective Intelligence Conference (CI '14)*.
- [W.1] **Patrick C. Shih** and Gary M. Olson. 2009. Using visualization to support idea generation in context. *ACM Conference on Creativity and Cognition Conference: Workshop on Creativity and Cognition in Engineering Design (C&C '09)*.

Patents

- [P.1] Kean G. Kuiper, Frank E. Levine, Enio M. Pineda, and **Patrick C. Shih**. 2010. Call stack sampling for a multi-processor system. *U.S. Patent and Trademark Office*, U.S. Patent No. 20100017583.

Dissertation and Thesis

- [T.2] **Patrick C. Shih**. 2011. *Brainstorming beyond the laboratory: Idea generation practices in software development firms*. University of California, Irvine. ProQuest/UMI No. 3490146.
- [T.1] **Patrick C. Shih**. 2005. *Fault-tolerance for distributed publish-subscribe systems*. Carnegie Mellon University. OCLC No. 320526509.

Invited Talks

- [T.11] "From Quantified Self to Quantified Other." Law, Science and Technology Seminar Series, TC Beirne School of Law and School of Information Technology and Electrical Engineering, University of Queensland. June 5, 2017.
- [T.10] "Toward Personalized Machine Learning: Fine-tuning Personalized Activity and Behavioral Data with End-User Interactive Visualization." Pacific Northwest National Laboratory. June 23, 2016.
- [T.9] "Temporal and Comparative Analysis of Teen and Adult Behaviors on Instagram." Intelligent & Interactive Systems Talk Series, Indiana University Bloomington. April 27, 2016.
- [T.8] "Supporting Civic Activities with Machine and Human Computation." School of Computing, Clemson University. February 13, 2015.
- [T.7] "Supporting Civic Activities with Machine and Human Computation." Department of Information and Library Science, Indiana University Bloomington. February 4, 2015.
- [T.6] "Supporting Civic Activities with Machine and Human Computation." Department of Information Systems, University of Maryland, Baltimore County. January 17, 2015.
- [T.5] "Supporting Civic Activities with Machine and Human Computation." Department of Computer Science, University of Bath. January 5, 2015.
- [T.4] "Supporting Civic Activities with Machine and Human Computation." Institute of Information Systems and Applications, National Tsing Hua University. December 17, 2014.

- [T.3] "Supporting Civic Activities with Machine and Human Computation." School of Computing, University of Leeds. December 15, 2014.
- [T.2] "Usability and Bad Design." Human factors and Ergonomics Society, The Pennsylvania State University. February 10, 2014.
- [T.1] "Technology in Use: Notes from the Field." Teaching Community Seminar, The Pennsylvania State University. February 27, 2013.

Media Coverage

- [M.18] "Two IGI Global Titles Receive Awards." IGI Global News. June 8, 2017.
- [M.17] "[인천 실항민 70 명 임진각 방문] '고향땅 저 앞인데... 왜 갈 수 없나.'" Gyeongin Daily, Gyeonggi-do, South Korea. May 26, 2017.
- [M.16] "Smartphone Apps Help Geographical Communities – and Pets." Center for Computer-Mediated Communication. November 11, 2016.
- [M.15] "Faculty, students at IU Bloomington receive grants for international research, teaching." IU Newsroom. February 3, 2016.
- [M.14] "Patrick Shih receives Mellon Innovating International Research, Teaching and Collaboration Fellowship." SICE News. January 22, 2016.
- [M.13] "ILS Welcomes Three New Faculty." SICE News. July 30, 2015.
- [M.12] "Instagram określi twoją dojrzałość?" NextWeb Media, Warsaw, Poland. July 14, 2015.
- [M.11] "New version of Arts Festival app enables users to create own experiences." Penn State News. July 6, 2015.
- [M.10] "Why & How Teens, Adults Use Instagram." Inked. June 23, 2015.
- [M.9] "Instagram user demographic study reveals how adult and teens use photo-sharing app." iDigitalTimes. June 3, 2015.
- [M.8] "Yes, teens and adults use Instagram differently." ThirdParent. June 3, 2015.
- [M.7] "IST researchers examine how teens, adults use Instagram." Penn State News. May 28, 2015.
- [M.6] "Carroll awarded \$279K grant to develop community engagement app." Penn State News. October 29, 2014.
- [M.5] "Penn State's Center for Human-Computer Interaction building an innovative community, one interaction at a time." iConnect Magazine. September 24, 2014.
- [M.4] "Arts Fest goes digital with new app." Onward State. July 9, 2014.
- [M.3] "Get the 'insider experience' with Central Pennsylvania Festival of the Arts app." Penn State News. July 7, 2014.
- [M.2] "Time is of the essence for new banking system developed at IST." Penn State News. June 25, 2014.
- [M.1] "IST researchers aim to increase community engagement through local news app." Penn State News. November 1, 2013.

TEACHING AND CURRICULUM DEVELOPMENT

Indiana University Bloomington

Instructor

UNIV 184R	Bridge to Informatics (DePauw University)	N = TBA	Spring 2018
INFO I527	Mobile and Pervasive Design (Cross-listed with CSCI P535)	N = 23	Fall 2017
CSCI P535	Pervasive Computing (Cross-listed with I527)	N = 23	Fall 2017
UNIV 184G	Bridge to Informatics (DePauw University)	N = 11	Spring 2017
ILS Z516	Human-Computer Interaction	N = 23	Fall 2016
ILS Z604	Social Computing and Computer-Supported Cooperative Work	N = 6	Spring 2016
ILS Z516	Human-Computer Interaction (Co-Instructor: Younei Soe)	N = 25	Fall 2015

Guest Lecturer

ILS Z586	Digital Curation, Instructor: Devan Donaldson		Fall 2016
INFO I407/I507	Introduction to Health Informatics, Instructor: Kay Connelly		Fall 2016
ILS Z516	Human-Computer Interaction, Instructor: Younei Soe		Spring 2016
UNIV 184D	Bridge to Informatics (DePauw University), Instructor: Katie Siek		Spring 2016
ILS Z701	Introduction to Doctoral Research in Information Science, Instructors: Howard Rosenbaum and Pnina Fichman		Fall 2015
INFO I407/I507	Introduction to Health Informatics, Instructor: Kay Connelly		Fall 2015

The Pennsylvania State University

Instructor

IST 413	Usability Engineering	N = 39	Fall 2014
IST 413	Usability Engineering	N = 39	Spring 2014
IST 413	Usability Engineering	N = 42	Spring 2013

Guest Lecturer

IST 473	Digital Design and Innovation, Instructor: Lisa (Lee) B. Erickson		Spring 2015
IST 331	Organization and Design of Information Systems: User and System Principles, Instructor: Frank E. Ritter		Spring 2012
IST 522	IST 522 Models, Theories and Frameworks of HCI, Instructor: John M. Carroll		Spring 2012
IST 521	IST 521 Human Computer Interaction: The User and Technology, Instructor: Mary Beth Rosson		Spring 2012

University of California, Irvine

Teaching Assistant

ICS 52	Introduction to Software Engineering, Instructor: Ban Al-Ani		Winter 2008
ICS 139W	Communications Skills for Computer Scientists, Instructor: Venita De Souza		Fall 2007

Project Mentor

INF 190	UbiComp Projects, Instructor: Gillian R. Hayes		Winter 2008
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Guest Lecturer

INF 131	Human Computer Interaction, Instructor: Yang Wang		Summer 2009
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Carnegie Mellon University

Teaching Assistant

18-342	18-342 Fundamentals of Embedded Systems, Instructors: Priya Narasimhan & Rajeev Gandhi [Best Teaching Assistant Award Nomination]		Fall 2004
18-845	18-845 Internet Services, Instructor: David O'Hallaron		Spring 2004

PROFESSIONAL AND ACADEMIC SERVICES**Program Chair**

Information Systems for Crisis Response and Management (ISCRAM) 2014

Journal Editorial Review Board

International Journal of Information Systems for Crisis Response and Management (IJISCRAM) 2016, 2017

Conference Program Committee

Human Factors in Computing Systems (CHI) 2016, 2018
 Computer Supported Cooperative Work & Social Computing (CSCW) 2015, 2018
 Supporting Group Work (GROUP) 2018
 Chinese CHI (Chinese CHI) 2015, 2016, 2017
 Web Science (WebSci) 2016, 2017
 Human Factors in Computing Systems Late-Breaking Work (CHI LBW) 2017
 Mobile Systems and Pervasive Computing (MobiSPC) 2017
 iConference (iConf) 2015, 2016
 Designing Interactive Systems (DIS) 2016
 Information Systems for Crisis Response and Management (ISCRAM) 2014
 Human-Centered Computing (HCC) 2014
 Presence (ISPR) 2012, 2014

Grant Reviewer

National Science Foundation Graduate Research Fellowship Program (NSF GRFP) Panelist 2016, 2017
 National Science Foundation Smart and Connected Health (NSF SCH) Reviewer 2015

Journal Paper Reviewer

International Journal of Human-Computer Studies (IJHCS) 2015, 2017
 International Journal of Environmental Research and Public Health (IJERPH) 2015, 2017
 ACM Transactions on Computer-Human Interaction (TOCHI) 2017
 Communications of the ACM 2017
 PLOS ONE 2016
 Interacting with Computers (IwC) 2016
 Information, Communication & Society (ICS) 2016
 PeerJ Computer Science (PeerJ CS) 2016
 Journal of Visual Languages and Computing (JVLC) 2016
 International Journal of Disaster Risk Reduction (IJDRR) 2016
 Zoo Biology (ZOO BIOL) 2016
 The Visual Computer (TVCJ) 2014, 2015
 Human-Computer Interaction (HCI) 2015
 Future Internet (Future Internet) 2015
 Information and Software Technology (INFSOF) 2013

Conference Paper Reviewer

Human Factors in Computing Systems (CHI) 2011, 2012, 2013, 2014, 2015, **2017***
 Computer Supported Cooperative Work & Social Computing (CSCW) 2012, 2013, 2014, **2016***, 2017
 iConference (iConf) 2017, 2018
 Chinese CHI (Chinese CHI) 2015, 2016, 2017
 Designing Interactive Systems (DIS) 2016, 2017
 Computer Supported Collaborative Learning (CSCL) 2015, 2017
 International Conference on Human-Computer Interaction (INTERACT) 2017
 Interactive Surfaces and Spaces (ISS) 2017
 Hawaii International Conference on System Sciences (HICSS) 2017
 Australian Conference on Computer-Human Interaction (OZCHI) 2017
 Mobile Systems and Pervasive Computing (MobiSPC) 2017
 Pervasive and Ubiquitous Computing (UbiComp) 2016
 Web Science (WebSci) 2016
 International Conference on Information Systems (ICIS) 2016
 Creativity and Cognition (C&C) 2015
 International Symposium on Wearable Computers (ISWC) 2015
 Americas Conference on Information Systems (AMCIS) 2015
 Human-Centered Computing (HCC) 2014
 Human-Computer Interaction with Mobile Devices and Services (MobileHCI) 2013

[* Special Recognitions for Exceptional Reviews]**Doctoral Consortium Committee**

Annual Meeting of the Association for Information Science and Technology (ASIS&T) 2017

Marketing and Communication Committee

Information Systems for Crisis Response and Management (ISCRAM) 2014

Publicity Chair

International Symposium on End User Development (IS-EUD) 2015

Proceedings Chair

Information Systems for Crisis Response and Management (ISCRAM) 2014

Session ChairHuman Factors in Computing Systems (CHI) 2016, 2017
iConference (iConf) – 2015, 2016**Student Volunteer Chair**

Computer Supported Cooperative Work & Social Computing (CSCW) 2011

Student VolunteerComputer Supported Cooperative Work & Social Computing (CSCW) 2008, 2010 Team Leader
Supporting Group Work (GROUP) 2009**University-related Activities**

IUB Institute for Digital Arts and Humanities (IDAH) Steering Committee, Committee Member 2017-18
 IUB Institute for Digital Arts and Humanities (IDAH) Research & Pedagogy Advocacy Subcommittee, Committee Member 2017-18
 IUB SICE Precision Health and Computing Faculty Search Committee, Committee Member 2017-18
 IUB SICE Director of Dean's External Affairs Search Committee, Committee Member 2017-18
 IU Bloomington Faculty Council (BFC), Committee Member Since 2017
 IUB Groups STEM Summer Research Experience Program (SREP), Advisor 2016, 2017
 IUB SICE Research Experiences for Undergraduates (REU), Advisor 2016, 2017
 IUB SICE Human Computer Interaction Consortium (HCIC), Coordinator 2016-17
 IUB SICE HCI/Interaction Design, Course Coordinator 2016-17
 IUB SICE Web Development Manager Search Committee, Committee Member 2016-17
 IUB SICE Director of Computing Outreach Education Search Committee, Committee Member 2016-17
 IUB Faculty-Student Mentoring Initiative (FMI), Advisor 2016-17
 IU SICE CHI Writing Workshop, Organizer 2016-17
 IUB SICE On-Campus Visit Day Faculty Panel, Panelist 2016-17
 IU Bloomington Faculty Council – Faculty Affairs Committee (BFC-FAC), Committee Member Since 2016
 IUB SICE Undergraduate Research Opportunities in Computing (UROC), Advisor Since 2015
 IUB SICE Spring Projects and Research Symposium, Judge Since 2015
 IUB SICE Fall Projects and Research Symposium, Judge Since 2015
 IUB SICE Proactive Health Informatics Faculty Search Committee, Committee Member 2015-16
 IUB ILS On-Campus Visit Day Faculty Panel, Panelist 2015-16
 IUB ILS MIS & MLS Social Computing Specialization Director, Director 2015-16
 IUB ILS Graduate Admission and Scholarship Committee, Committee Member 2015-16
 IUB ILS Graduate Programs Subcommittee on MIS Curriculum, Committee Member 2015-16
 Penn State IST Scholarship Committee, Committee Member 2014-15
 Penn State IST Awards Committee, Committee Member 2014-15
 Penn State IST College Assessment Committee, Committee Member 2014-15
 Penn State IST Distributed Research Experiences for Undergraduates (DREU), Advisor Summer 2014
 Penn State Postdoc Research Exhibition, Judge 2013-15
 Penn State College of Engineering Research Symposium, Judge 2013-14
 Penn State Graduate Student Research Exhibition, Judge 2012-14
 Penn State IST Undergraduate Commencement Ceremony, Faculty-at-large 2012-14
 Penn State IST Web Committee, Committee Member 2012-15
 Penn State IST Human Computer Interaction Curriculum Committee, Committee Member 2012-15
 Penn State IST Human Computer Interaction Special Interests Group, Faculty Member 2012-15
 UC Irvine Informatics Graduate Student Association, Board Committee & Social Chair 2010-11
 Engineering Society of UCLA, Junior Class Representative 2002-03
 IEEE, Micromouse Team Officer 2001-02
 Eta Kappa Nu National Engineering Honor Society, Project Committee 2001-02
 Tau Beta Pi National Engineering Honor Society, Resume Book Committee Chair 2001-02

MENTORSHIP**Indiana University Bloomington***Doctoral Students*

Swapna Chandrashekar Joshi, Research Rotation Advisor Since 2017
 Lucas Cook, Advisory Committee Since 2017
 Bo-chiuan Chen, Research Committee Since 2017
 Aehong Min, Chair Since 2016
 Gege Gao, Chair Since 2016
 Anna N Baglione, Chair Since 2016

Daehyoung Lee, Minor Advisor	Since 2016
Tom Ongwere, Advisory Committee	Since 2016
Juan Fernando Maestre, Chair	Since 2015
Andreas Bueckle, Minor Advisor	Since 2015
Shannon Yang, Advisory Committee	Since 2015
Vincent Malic, Research Practicum Advisor	Since 2015
Zheng Gao, Research Practicum Advisor	Since 2015
Pei-Ying Chen, Independent Study Advisor	2015 – 2017
Dahee Chung, Research Committee	2015 – 2017
Chase Matthew McCoy, Research Practicum Advisor	2015 – 2016
Sara Tena Garcia, Dissertation External Examiner, Universidad Carlos III de Madrid	2015 – 2016

Master's Students

Rounak Choudhary, Independent Study Advisor	2015 – 2017
Yu-Chen Huang, Independent Study Advisor	2015 – 2017
Revathy Sridharan, Independent Study Advisor	2015 – 2017

Undergraduate Students

Hannah Blalock, Advisor, Emerging Scholars Research Experiences for Undergraduate Women (CEWiT REU-W)	Since 2017
Rachel Sawchuk, Advisor, SICE Undergraduate Research Opportunities in Computing (UROC)	Since 2017
Gabrielle S. Cantor, Advisor, Emerging Scholars Research Experiences for Undergraduate Women (CEWiT REU-W); Advisor, SICE Research Opportunities for Undergraduates (REU)	Since 2017 Summer 2017
Cody Banister, Advisor, SICE Undergraduate Research Opportunities in Computing (UROC)	Since 2016
Julia Dunbar, Advisor, SICE Research Opportunities for Undergraduates (REU)	Summer 2017
Ciabhan L. G. Connelly, Advisor, SICE Research Opportunities for Undergraduates (REU)	Summer 2017
Maxine Marie Girard, Advisor, SICE Research Opportunities for Undergraduates (REU)	Summer 2017
Meagan Price, Advisor, SICE Research Opportunities for Undergraduates (REU)	Summer 2017
Sergio Ramirez Martin, Advisor, SICE Research Opportunities for Undergraduates (REU)	Summer 2017
Ali A. Talib, Advisor, Groups STEM Summer Research Experience Program (SREP)	Summer 2017
William Cole Smith, Advisor, Groups STEM Summer Research Experience Program (SREP)	Summer 2017
Qian (Judy) Dai, Advisor, SICE Undergraduate Research Opportunities in Computing (UROC)	2016 – 2017
Vanessa Pereira, Advisor, SICE Research Opportunities for Undergraduates (REU)	Summer 2016
Grace Bastin, Advisor, SICE Research Opportunities for Undergraduates (REU)	Summer 2016
Alize Dickey, Advisor, Groups STEM Summer Research Experience Program (SREP)	Summer 2016
Marille Velez, Advisor, Groups STEM Summer Research Experience Program (SREP)	Summer 2016
Lee Hiler, Advisor, SICE Undergraduate Research Opportunities in Computing (UROC)	2015 – 2017

Visiting Scholars

Hong Qiao, Faculty Host, Associate Professor, School of Management Science and Engineering, Shandong Normal University	2015 – 2017
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The Pennsylvania State University*Doctoral Students*

Kyungsik (Keith) Han, Dissertation Committee	2012 – 2015
Yu Wu, Mentor, Dissertation	2012 – 2015
Saijing Zheng, Mentor, Dissertation	2013 – 2015
Jing Wang, Mentor, Dissertation	2012 – 2013
Sara Tena Garcia, Mentor, Universidad Carlos III de Madrid	Summer 2013

Master's Students

Joslenne Pena, Mentor, Master's Thesis	2013 – 2015
Saloni J. D. Vaghela, Advisor, Master's Thesis	2014 – 2015
Unsuik Heo, Mentor, Department of Computer Science and Engineering	2014 – 2015

Undergraduate Students

Brett Holdon, Advisor, Honors Thesis	2014 – 2015
Liam Neigh, Advisor, Summer Undergraduate Research Fellowship (SURF)	Summer 2014
Sarah Alice Hanna, Mentor, Distributed Research Experiences for Undergraduates (DREU), Barnard College of Columbia University	Summer 2014
Diana Zhang, Advisor, Summer Undergraduate Research Fellowship (SURF)	Summer 2013

University of California, Irvine*Master's Students*

Jana Schumann, Mentor, Otto-von-Guericke-University, Magdeburg	Summer 2011
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Undergraduate Students

Sen Hirano, Mentor, Undergraduate Research Project	Spring 2008
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