Assistant Professor patshih@indiana.edu +1 (812) 856-4022 https://patshih.luddy.indiana.edu Myles Brand Hall E259 Department of Informatics Indiana University Bloomington Bloomington, IN 47408-3912

#### RESEARCH INTERESTS

My research focuses on how to better support health and wellbeing, specifically that of underserved and vulnerable populations, through the design, development, and evaluation of sociotechnical systems and community-based mechanisms. I also design technologies to amplify human and animal capabilities in animal-assisted interventions and to improve animal welfare.

### **EDUCATION**

University of California, Irvine

Ph.D. in Information and Computer Science 2006 – 2011 Dissertation Committee: Gary M. Olson (Chair), David F. Redmiles (Co-Chair), and Gina Venolia

**Carnegie Mellon University** 

M.S. in Information Networking 2003 – 2005

Thesis Committee: Priya Narasimhan (Chair) and Rajeev Gandhi

University of California, Los Angeles

B.S. in Computer Science and Engineering, *cum laude*Advisors: Lixia Zhang and Milos Ercegovac

#### **EXPERIENCES**

# **Indiana University Bloomington**

**Appointments** 

Assistant Professor Since 2016

Department of Informatics

Data Science Program (courtesy)

Department of Computer Science (courtesy)

Department of Information and Library Science (courtesy)

Part-time Assistant Professor 2016 – 2018

Computer Science Department, DePauw University

Assistant Professor 2015 – 2016

Department of Information and Library Science

Faculty Directorships and Affiliations

Director, Graduate Studies for Data Science	Since 2020
Co-Director, PhD and MS Animal Informatics Track	Since 2020
Co-Director, PhD Minor in Animal-Computer Interaction	Since 2020
Co-Director, BS Cognate/Minor in Animal-Computer Interaction	Since 2020
Affiliated Faculty, Center for Rural Engagement (CRE)	Since 2019
Affiliated Faculty, Crisis Technologies Innovation Lab (CTIL)	Since 2019
Affiliated Faculty, Center for the Integrative Study of Animal Behavior (CISAB)	Since 2016
Affiliated Faculty, Indiana University Network Science Institute (IUNI)	Since 2015
Affiliated Faculty, Institute for Digital Arts and Humanities (IDAH)	Since 2015
Affiliated Faculty, Center of Excellence for Women in Technology (CEWiT)	Since 2015
Affiliated Faculty, Institute for Software Research (ISR), University of California, Irvine	Since 2015
Director, Societal Computing Lab (SoCo Lab)	Since 2015

# **Fellowship**

Fellow, Minority Serving Institution Faculty Research Development Institute (MSI-FRDI) Since 2015 Fellow, Center for Computer-Mediated Communication (CCMC) Since 2015 Fellow, Grant Thornton Institute for Data Exploration for Risk Assessment and Management 2020 - 2021 Fellow, NSF Transforming Education, Stimulating Teaching and Learning Excellence (TRESTLE) 2019 - 2020Fellow, Transformative Learning Collegium (TLC) 2019 - 2020 Fellow, Course Development Institute (CDI) 2019 - 2020 Fellow, Andrew W. Mellon Foundation 2016 - 2017 Fellow, Consortium for the Science of Sociotechnical Systems (CSST) Summer 2016 Fellow, National Center for Faculty Development and Diversity (NCFDD) 2015 - 2016

### The Pennsylvania State University

### **Appointments**

Research Associate and Lecturer (Graduate Faculty)

College of Information Sciences and Technology

Research Supervisor: John M. Carroll

# Faculty Directorships and Affiliations

Affiliated Faculty, Center for Human-Computer Interaction

### University of California, Irvine

Graduate Researcher, Hana Lab / Behavior Lab

Advisor: Gary M. Olson (Chair)

Graduate Researcher, Collaboration Research in Action, Design, and Learning Lab

2006 – 2008

Advisor: David F. Redmiles (Co-Chair)

### **Microsoft Research**

Research Intern
Visualization and Interaction for Business and Entertainment (VIBE) Group, Redmond, WA
Research Supervisor: Gina Venolia

# **IBM Research**

Research Intern

User Systems and Experience Research (USER) Group, Almaden Research Center, San Jose, CA
Research Supervisor: Tessa Lau

Extreme Blue Intern
Component Systems Group, Thomas J. Watson Research Center, Hawthorne, NY
Research Supervisor: Paul P. Maglio

Research Developer
User Systems and Experience Research (USER) Group, Almaden Research Center, San Jose, CA
Research Supervisor: John J. Barton

WBI Tools Developer and Performance Analyst
Websphere Business Integration Performance and Development Division, Austin, TX

Extreme Blue Intern Spring 2005 User Systems and Experience Research (USER) Group, Almaden Research Center, San Jose, CA Research Supervisor: John J. Barton

Software Developer Intern—Test Tool Development
Printing Systems Division, Boulder, CO
Summer 2004

Patrick C. Shih	<u>Curriculum Vitae</u>
Carnegie Mellon University Graduate Researcher, Proactively Reconfigurable, Adaptive, Reliable Middleward Advisors: Priya Narasimhan (Chair) and Rajeev Gandhi	e Lab 2003 – 2005
University of California, Los Angeles Undergraduate Researcher Internet Research Lab Advisor: Lixia Zhang	2002 – 2003
Lab Consultant and Technical Support UCLA Engineering SEASnet Computing Facility	2001 – 2003
Undergraduate Researcher Digital Arithmetic and Reconfigurable Architecture Laboratory Advisor: Milos D. Ercegovac	2001 – 2002
MSC.Software Mainframe Systems Intern High Performance Computing Division, Santa Ana, CA	Summer 2002

# HONORS AND AWARDS

Honor and Research Awards Grant Thornton Institute for Data Exploration for Risk Assessment and Management (GT-)	(DEA)
Fellowship	2020 - 2021
ACM Senior Member Award (top 25% of ACM)	2020
EAI PervasiveHealth Best Paper Honorable Mention Award (top 5%) [C.38]	2020
NSF SCH Aspiring PI Award	2020
DiGRA Best Paper Award (top 3%) [C.28]	2018
European Exhibition of Creativity and Innovation Conference (Euroinvent) Silver Medal Av	
	2017
Andrew W. Mellon Foundation Faculty Fellowship	2016 – 2017
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 Finalist (top 3%) [C.14]	2015
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) Award	2007
CMU Information Networking Institute Scholarship	2003 – 2005
Golden Key International Honour Society	2003
UCLA University Scholarship	2002
UCLA Paul Sandager Alumni Scholarship Eta Kappa Nu International Electrical and Computer Engineering Honor Society	2002
	2001
Tau Beta Pi National Engineering Honor Society UCLA Dean's Honor List	2001
Stanford National Invitational Congress Debate Finalist	2001
US FIRST Robotic Team Award	1999 1998
CS FIRST RODOUC Team Award	1990
Teaching Awards	
NSF Transforming Education, Stimulating Teaching and Learning Excellence (TRESTLE) I	Fellowship
	2019 – 2020
Indiana University Trustees Teaching Award	2018 – 2019
IU Project and Research Symposium "Most Potential for Social Good" Award [INFO-I 527 8	& CSCI-P 535]
	Fall 2017
IU Project and Research Symposium "People's Choice" Award [INFO-I 527 & CSCI-P 535]	Fall 2017
1000 Pitches Summit finalist in "Mobile Apps" category (top 9 out of 1083) [IST 413]	2014 - 2015
CMU Best Teaching Assistant Award Finalist	2004 - 2005
Service Awards	
ACM CHI Special Recognitions for Outstanding Reviews	2021
ACM DIS Special Recognitions for Outstanding Reviews	2020
ACM CHI Special Recognitions for Outstanding Reviews	2020
IU Groups Scholars Program STEM Mentor of the Year	2018 – 2019
ACM DIS Special Recognitions for Outstanding Reviews	2017
ACM CHI Special Recognitions for Outstanding Reviews	2017
IU Office of Mentoring Services and Leadership Development Award	2016 – 2017
ACM CSCW Special Recognitions for Outstanding Reviews	2016

#### **FUNDING**

Total award amount: \$1,257,829 (PI: \$806,681; Co-PI/Co-I: \$451,148)

### **External Grants**

[EG.8] Grant Thornton Institute for Data Exploration for Risk Assessment and Management (GT-IDEA) Fellowship. 07/01/20-06/30/21. PI: **Patrick C. Shih.** \$8,000.

- [EG.7] National Science Foundation #1909700. 01/01/20-12/31/22. CHS: Small: Collaborative Research: Shared Mobility Systems to Address Transportation Barriers of Underserved Urban and Rural Communities. IUB PI: Patrick C. Shih. \$211,769; UM PI: Tiffany Veinot; UM Co-PI: Tawanna Dillahunt. \$288,231. IUB REU Supplement Award: \$24,000. UM REU Supplement Award: \$8,000; Total Award: \$532,000.
- [EG.6] Templeton World Charity Foundation #0271. 07/01/18-10/31/21. Teaching in wild New Caledonian crows. MPI-SHH PI: Natalie Uomini. \$182,398; IUB Co-PI: **Patrick C. Shih**. \$42,668; Total Award: \$225,066.
- [EG.5] Andrew W. Mellon Foundation Faculty Fellowship. 07/01/16-06/30/17. *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. 07/01/15-06/30/16. Population monitoring, seasonal activity, and landscape movements of little brown myotis (Myotis lucifugus) in Yellowstone National Park. NPS PI: John Treanor; OU PI: Joe Johnson; UC PI: Jessica Kropczynski; IU PI: Patrick C. Shih. \$60,000.
- [EG.3] Yellowstone Park Foundation. 07/01/15–06/30/16. *Bat ecology and movements in Yellowstone National Park*. NPS PI: John Treanor; OU PI: Joe Johnson; UC PI: Jessica Kropczynski; IUB PI: **Patrick C. Shih**. \$50,000.
- [EG.2] Bloomberg Financial Products UX Research Awards. 07/01/15-06/30/16. *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. 07/01/14-06/30/15. PI: **Patrick C. Shih**. \$2,000.

### **Internal Grants**

- [IG.7] Indiana University Center for Rural Engagement Direct Collaboration Grant. 07/01/20-06/30/21. A Smartphone App-based Information Portal for Accessing Locally Relevant Public Health Information for Rural Residents. PI: **Patrick C. Shih.** \$14,942.
- [IG.6] Indiana University Collaborative Research Grants. 05/01/18-12/31/19. A Randomized Control Trial to Assess the Efficacy of a Gamified Mobile Application Intervention to Increase Physical Activity and Reduce Anxiety in Adults with Autism Spectrum Diagnoses (ASD). SPH PI: Georgia C. Frey; EDU PI: Scott Bellini; INFO PI: **Patrick C. Shih**. \$74,971.
- [IG.5] IUB New-Frontiers New Currents Funding Award. 11/30/17-12/31/18. Stories of War: A Symposium on Conflict and Civic Engagement. PI: **Patrick C. Shih**. \$19,768.
- [IG.4] IUB Collaborative Research and Creative Activity Funding Award. 05/01/17-06/30/18. *Just Like Me: Stories from All Sides of the Vietnam War*. PI: **Patrick C. Shih**. \$20,000.
- [IG.3] Penn State Center for Online Innovation in Learning Research Initiation Grant. 07/01/15-06/30/16. Occupy MOOCs: Understanding and designing for actual student motivations and activities in MOOCs. PI: John M. Carroll; Co-PI: Mary Beth Rosson, **Patrick C. Shih**. \$49,082.
- [IG.2] Penn State Schreyer Institute for Teaching Excellence Teaching Project Grant. 07/01/14-06/30/15. Supporting Technology Augmented Rhetoric (STAR). PI: **Patrick C. Shih**; Co-PI: Jessica Kropczynski. \$5,000.
- [IG.1] Penn State Center for Online Innovation in Learning Research Initiation Grant. 07/01/13-06/30/14. Supporting Dialectical Learning with Piazza. PI: John M. Carroll; Co-PI: **Patrick C. Shih.** \$42,000.

### **PUBLICATIONS**

I have produced 116 publications (23 Journal Papers; 8 Book Chapters; 1 Proceeding; 44 Conference Papers; 12 Extended Abstracts; 25 Workshop Papers/Posters/Demos; 1 Patent; 2 Theses); 48 Publicity and Media Coverage (19 Invited Presentations; 29 Media Coverage)

Google Scholar (**Citations: 2010; h-index: 22; i10-index: 35**) https://scholar.google.com/citations?hl=en&user=Lzw8EnkAAAAJ

Publications listed in this CV follows the ACM Citation Style and References Formats.

# **Journal Papers**

- [J.23] Anna N. Baglione, Michael Paul Clemens, Juan F. Maestre, Aehong Min, Luke Dahl, and **Patrick C. Shih**. 2021. Understanding the technological practices and needs of music therapists. *Proceedings of the ACM on Human-Computer Interaction*, CSCW.
- [J.22] Aehong Min, Wendy Miller, Luis M. Rocha, Katy Borner, Rion Brattig Correia, and **Patrick C. Shih**. 2021. Just in time: Challenges and opportunities of first aid care information sharing for supporting epileptic seizure response. *Proceedings of the ACM on Human-Computer Interaction*, CSCW.
- [J.21] Zhi Wang, Anne Buu, David K. Lohrmann, **Patrick C. Shih**, and Hsien-Chang Lin. 2021. The role of family conflict in mediating impulsivity to early substance exposure among preteens. *Addictive Behaviors* 115, 106779 (Apr. 2021), 1-8. https://doi.org/10.1016/j.addbeh.2020.106779
- [J.20] Juan F. Maestre, Patrycja Zdziarska, Aehong Min, Anna N. Baglione, Chia-Fang Chung, and **Patrick C. Shih**. 2020. Not another medication adherence app: Critical reflections on addressing public HIV-related stigma through design. *Proceedings of the ACM on Human-Computer Interaction* 4, CSCW3, Article 262 (Dec. 2020), 1-28. https://doi.org/10.1145/3434171
- [J.19] Daehyoung Lee, Georgia C. Frey, Aehong Min, Bogoan Kim, Donetta Cothran, Scott Bellini, Kyungsik Han, and **Patrick C. Shih**. 2020. Usability inquiry of a gamified behavior change app for increasing physical activity and reducing sedentary behavior in adults with and without autism spectrum disorder. *Health Informatics Journal* 26, 4 (Dec. 2020), 2992-3008. https://doi.org/10.1177/1460458220952909
- [J.18] Bogoan Kim, Daehyoung Lee, Aehong Min, Seungwon Paik, Georgia C. Frey, Scott Bellini, Kyungsik Han, and **Patrick C. Shih**. 2020. PuzzleWalk: A theory-driven iterative design inquiry of a mobile game for promoting physical activity in adults with autism spectrum disorder. *PLOS ONE* 15, 9, e0237966 (Sep. 2020), 1-24. https://doi.org/10.1371/journal.pone.0237966
- [J.17] Leysia Palen, Jennings Anderson, Melissa Bica, Carlos Castillos, John Crowley, Paloma Díaz Pérez, Megan Finn, Rob Grace, Amanda Hughes, Muhammad Imran, Marina Kogan, Nicolas Lalone, Prasenjit Mitra, Wendy Norris, Katie Pine, Hemant Purohit, Christian Reuter, Caroline Rizza, Lise St Denis, Bryan Semaan, Valerie Shalin, Lea Shanley, **Patrick C. Shih**, Robert Soden, Kate Starbird, Keri K. Stephen, Z O. Toups, and Tom Wilson. 2020. Crisis informatics: Humancentered research on tech & crises: A guided bibliography developed by crisis informatics researchers. *Hyper Articles en Ligne*, hal-02781763f (June 2020), 1-14.
- [J.16] Aehong Min, Daehyoung Lee, Gege Gao, Stella Jeong, and **Patrick C. Shih**. 2020. Design and assessment of a personal breathalyzer intervention to support responsible drinking. *International Journal of Human-Computer Studies* 137, 102382 (May 2020), 1-15. https://doi.org/10.1016/j.ijhcs.2019.102382
- [J.15] Gege Gao and **Patrick C. Shih**. 2019. Effects of mobile platform on female engagement in MOBA. *Transactions of the Digital Games Research Association* 4, 3 (June 2019), 75-116. https://doi.org/10.26503/todigra.v4i3.107
- [J.14] Juan F. Maestre, Susan C. Herring, Aehong Min, Ciabhan L. Connelly, and **Patrick C. Shih**. 2018. Where and how to look for help matters: Analysis of support exchange in online health communities for people living with HIV. *Information* 9, 10, Article 259 (Oct. 2018), 1-16. http://doi.org/10.3390/info9100259

[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, CSCW, Article 115 (Dec. 2017), 1-22. https://doi.org/10.1145/3134750 (27% acceptance rate)

- [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 (April 2017), 51-63.
- [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://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://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 support networks mediated by mobile technology. *Interacting with Computers* 28, 3 (May 2016), 220-237. http://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://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 practices. *Information and Software Technology* 67 (Nov. 2015), 1-12. http://doi.org/10.1016/j.infsof.2015.06.002
- [J.6] **Patrick C. Shih**, Kyungsik Han, and John M. Carroll. 2015. Using social multimedia content to inform emergency planning of recurring and cyclical events in local communities. *Journal of Homeland Security and Emergency Management* 12, 3 (Sep. 2015), 627-652. http://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://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 (June 2015), 1-17.
- [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 (June 2015), 1-22. http://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://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://doi.org/10.1080/10447318.2014.925773

### **Book Chapters**

- [BC.8] Jacob E. Abbott, Gege Gao, and Patrick C. Shih. 2019. Creen: A carbon footprint calculator designed for calculation in context. In Natalie G. Taylor, Caitlin Christian-Lamb, Michelle H. Martin, and Bonnie Nardi (Eds.), Information in Contemporary Society. iConference 2019. Lecture Notes in Computer Science 11420. Springer, Cham, 769-776. https://doi.org/10.1007/978-3-030-15742-5\_72 (33% acceptance rate)
- [BC.7] Zheng Gao, Vincent Malic, Shutian Ma, and **Patrick C. Shih**. 2019. How to make a successful movie: Factor analysis from both financial and critical perspectives. In Natalie G. Taylor, Caitlin Christian-Lamb, Michelle H. Martin, and Bonnie Nardi (Eds.), *Information in Contemporary Society. iConference 2019. Lecture Notes in Computer Science 11420.* Springer, Cham, 669-678. https://doi.org/10.1007/978-3-030-15742-5\_63 (33% acceptance rate)

[BC.6] Kyungsik Han, **Patrick C. Shih**, Victoria Bellotti, and John M. Carroll. 2019. It's time there was an app for that too: A usability study of mobile timebanking. In Information Resources Management Association (Ed.), *Multigenerational Online Behavior and Media Use: Concepts, Methodologies, Tools, and Applications*. IGI Global, Hershey, PA, 242-265. http://doi:10.4018/978-1-5225-7909-0.ch014

- [BC.5] **Patrick C. Shih**. 2018. Beyond human-in-the-loop: Empowering end-users with transparent machine learning. In Jianlong Zhou and Fang Chen (Eds.), *Human and Machine Learning: Visible, Explainable, Trustworthy, and Transparent*. Springer, Cham, 37-54. https://doi.org/10.1007/978-3-319-90403-0\_3
- [BC.4] Aehong Min, Daehyoung Lee, and **Patrick C. Shih**. 2018. Potentials of smart breathalyzer: Interventions for excessive drinking among college students. In Gobinda Chowdhury, Julie McLeod, Val Gillet, and Peter Willett (Eds.), *Transforming Digital Worlds. iConference 2018. Lecture Notes in Computer Science 10766*. Springer, Cham, 195-206. https://doi.org/10.1007/978-3-319-78105-1\_24 (30% acceptance rate)
- [BC.3] John M. Carroll, **Patrick C. Shih**, Jessica Kropczynski, Guoray Cai, G., Mary Beth Rosson, and Kyungsik Han. 2016. The internet of places at community-scale: Design scenarios for hyperlocal neighborhood. In Shin'ichi Konomi and George Roussos (Eds.), *Enriching Urban Spaces with Ambient Computing, the Internet of Things, and Smart City Design*. IGI Global, Hershey, PA, 1-24. http://doi.org/10.4018/978-1-5225-0827-4.ch001
- [BC.2] Joslenne Pena, **Patrick C. Shih**, and Mary Beth Rosson. 2015. Instructors as end-user developers: Technology usage opportunities in the inverted classroom. In Elena Railean, Gabriela Walker, Atilla Elçi, and Liz Jackson (Eds.), *Handbook of Research on Applied Learning Theory and Design in Modern Education*. IGI Global, Hershey, PA, 560-571. http://doi:10.4018/978-1-4666-9634-1.ch027
  - [European Exhibition of Creativity and Innovation Conference (Euroinvent) Diploma and Silver Medal Award]
- [BC.1] John M. Carroll, **Patrick C. Shih**, Blane Hoffman, Jing Wang, and Kyungsik Han. 2014. Presence and hyperpresence: Implications for community awareness. In Giuseppe Riva, John Waterworth, and Dianne Murray (Eds.), *Interacting with Presence: HCI and the Sense of Presence in Computer-Mediated Environments*. De Gruyter, Berlin/Boston, 70-82. https://doi.org/10.2478/9783110409697.5

# **Proceedings**

[CP.1] Starr Roxanne Hiltz, Mark S. Pfaff, Linda Plotnick, and **Patrick C. Shih** (Eds.). *ISCRAM 2014 Conference Proceedings Book of Papers – 11th International Conference on Information Systems for Crisis Response and Management*. The Pennsylvania State University, State College, PA. USA. ISBN: 978-0-692-21194-6

#### **Conference Papers**

- [C.44] Juan F. Maestre, Tawanna R. Dillahunt, Alec A. Theisz, Megan Furness, Vaishnav Kameswaran, Tiffany Veinot, and **Patrick C. Shih**. 2021. Examining mobility among people living with HIV in rural areas. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '21)*. ACM, New York, NY. (26.3% acceptance rate)
- [C.43] Youngseung Jeon, Seungwon Paik, **Patrick C. Shih**, and Kyungsik Han. 2021. FashionQ: An AIdriven creativity support tool for facilitating ideation in fashion design. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '21)*. ACM, New York, NY. (26.3% acceptance rate)
- [C.42] Seungwon Paik, Youngseung Jeon, **Patrick C. Shih**, and Kyungsik Han. 2021. I Feel More Engaged When I Move!: Deep Learning-based Backward Movement Detection and its Application. In *Proceedings of the IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR '21)*. ACM, New York, NY.
- [C.41] Aehong Min, Flannery Currin, Gustavo Razo, Kay Connelly, and **Patrick C. Shih**. 2020. Can I take a break? Facilitating in-home respite care for family caregivers of older adults. In *American Medical Informatics Association Annual Symposium Proceedings (AMIA '20)*.

[C.40] K. Cassie Kresnye, Christopher Flynn Martin, and **Patrick C. Shih**. 2020. Drone delivery service: An orangutan enrichment pilot study. In *Proceedings of the International Conference on Animal-Computer Interaction (ACI '20)*. ACM, New York, NY, USA.

- [C.39] K. Cassie Kresnye and **Patrick C. Shih**. 2020. Movement patterns as enrichment: Exploratory canine-drone interaction pilot study. In *Proceedings of the International Conference on Animal-Computer Interaction (ACI '20)*. ACM, New York, NY, USA.
- [C.38] Tom Ongwere, Gabrielle S. Cantor, James Clawson, Patrick C. Shih, and Kay Connelly. 2020. Design and care for discordant chronic comorbidities: A comparison of healthcare providers' perspectives. In Proceedings of the EAI International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth '20). ACM, New York, NY, USA. https://doi.org/10.1145/3421937.3422013
  [Best Paper Honorable Mention Award (top 5%)]
- [C.37] K. Cassie Kresnye, Alec A. Theisz, Lauren Trester, and **Patrick C. Shih**. 2019. Barks & Rec: A dog park socio-technical system. In *Proceedings of the International Conference on Animal* 
  - Computer Interaction (ACI '19). ACM, New York, NY, USA, Article 12, 1-6. https://doi.org/10.1145/3371049.3371064
- [C.36] K. Cassie Kresnye, Annie M. Phelps, and **Patrick C. Shih**. 2019. Towards rehabilitation smart habitats: Designing for North American opossum joeys. In *Proceedings of the International Conference on Animal-Computer Interaction (ACI '19)*. ACM, New York, NY, USA, Article 11, 1-6. https://doi.org/10.1145/3371049.3371058
- [C.35] Zheng Gao and **Patrick C. Shih**. 2019. Communities of support: Social support exchange in a HIV online forum. In *Proceedings of the International Symposium of Chinese CHI (Chinese CHI '19*). ACM, New York, NY, 37-43. https://doi.org/10.1145/3332169.3333576 (50% acceptance rate)
- [C.34] K. Cassie Kresnye and **Patrick C. Shih**. 2018. "We have a volunteer coordinator who is unfortunately a volunteer": A qualitative assessment of animal shelters. In *Proceedings of the International Conference on Animal-Computer Interaction (ACI '18)*. ACM, New York, NY, Article 14, 1-6. https://doi.org/10.1145/3295598.3295612
- [C.33] Gege Gao, Yuxuan Zhang, Cheng Cheng, Yi Bu, and Patrick C. Shih. 2018. Designing to enhance student participation in campus heritage using augmented reality. In Proceedings of the Digital Heritage International Congress held jointly with the International Conference on Virtual Systems and Multimedia (DigitalHERITAGE / VSMM 2018). IEEE, New York, NY, 261-264. https://doi.org/10.1109/DigitalHeritage.2018.8810077
- [C.32] **Patrick C. Shih** and Ronald J. Osgood. 2018. Vietnam War stories: Stories from all sides. In *Proceedings of the Digital Heritage International Congress held jointly with the International Conference on Virtual Systems and Multimedia (DigitalHERITAGE / VSMM 2018).* IEEE, New York, NY, 35-38. https://doi.org/10.1109/DigitalHeritage.2018.8810004
- [C.31] Tom Ongwere, Gabrielle Cantor, Sergio Ramirez Martin, **Patrick C. Shih**, James Clawson, and Kay Connelly. 2018. Design hotspots for care of discordant chronic comorbidities: Patients' perspectives. In *Proceedings of the Nordic Conference on Human-Computer Interaction* (NordiCHI '18). ACM, New York, NY, 571-583. https://doi.org/10.1145/3240167.3240221 (24% acceptance rate)
- [C.30] Daehyoung Lee, Georgia C. Frey, Alison Cheng, and Patrick C. Shih. 2018. Puzzle Walk: A gamified mobile app to increase physical activity in adults with autism spectrum disorder. In Proceedings of the International Conference on Virtual Worlds and Games for Serious Applications (VS-GAMES '18). IEEE, New York, NY, 180-183. https://doi.org/10.1109/VS-Games.2018.8493439 (24% acceptance rate)
- [C.29] Gege Gao, Yuxuan Zhang, Yi Bu, and **Patrick C. Shih**. 2018. Design exploration on robots to support single women at home in China. In *Proceedings of the International Conference on Robot and Human Interactive Communication (RO-MAN '18)*. IEEE, New York, NY, 1190-1195. https://doi.org/10.1109/ROMAN.2018.8525694
- [C.28] Gege Gao and Patrick C. Shih. 2018. Does platform matter? A game design analysis of female engagement in MOBA games. In Proceedings of the Digital Games Research Association Conference (DiGRA '18). DiGRA Digital Library, 1-16. (52% acceptance rate) [Best Paper Award (top 3%)]

[C.27] Saloni J. D. Vaghela and **Patrick C. Shih**. 2018. WalkSafe: College campus safety app. In *Proceedings of the International Conference on Information Systems for Crisis Response and Management (ISCRAM '18*). ISCRAM Association, 983-993.

- [C.26] Juan F. Maestre, Haley MacLeod, Ciabhan L. Connelly, Julia C. Dunbar, Jordan Beck, Katie A. Siek, and Patrick C. Shih. 2018. Defining through expansion: Conducting Asynchronous Remote Communities (ARC) research with stigmatized groups. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '18)*. ACM, New York, NY, Paper 557, 1-13. https://doi.org/10.1145/3173574.3174131 (26% acceptance rate)
- [C.25] Anna N. Baglione, Maxine M. Girard, Meagan Price, James Clawson, and Patrick C. Shih. 2018. Modern bereavement: A model for complicated grief in the digital age. In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '18). ACM, New York, NY, Paper 416, 1-12. https://doi.org/10.1145/3173574.3173990 (26% acceptance rate)
- [C.24] Hong Qiao and **Patrick C. Shih**. 2018. Use of social media for academic purpose in China. In *Proceedings of the International Symposium of Chinese CHI* (Chinese CHI '18). ACM, New York, NY, 84-94. https://doi.org/10.1145/3202667.3202679 (52% acceptance rate)
- [C.23] Juan F. 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, New York, NY, 328-336. https://doi.org/10.1145/3152771.3152806 (47% acceptance rate)
- [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, New York, NY, 307-317. https://doi.org/10.1145/3152771.3152804 (47% acceptance rate)
- [C.21] Jeremiah Parry-Hill, **Patrick C. Shih**, Jennifer Mankoff, and Daniel Ashbrook. 2017. Understanding volunteer AT fabricators: Opportunities and challenges in DIY-AT for Others in e-NABLE. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '17)*. ACM, New York, NY, 6184-6194. https://doi.org/10.1145/3025453.3026045 (25% acceptance rate)
- [C.20] Xianghua Ding, Patrick C. Shih, and Ning Gu. 2017. Socially embedded work: A study of wheelchair users performing online crowd work in China. In Proceedings of the ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW '17). ACM, New York, NY, 642-654. https://doi.org/10.1145/2998181.2998282 (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, New York, NY, 71-81. https://doi.org/10.1145/2914586.2914602 (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. https://doi.org/10.9776/16160 (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 held jointly with the International Conference on Virtual Systems and Multimedia (DigitalHERITAGE / VSMM 2018).* IEEE, New York, NY, 321-324. https://doi.org/10.1109/DigitalHeritage.2015.7413892 (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, New York, NY, 4039-4042. https://doi.org/10.1145/2702123.2702555 (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, New York, NY, 1075-1084. https://doi.org/10.1145/2702123.2702560 (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 Finalist (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 and Social Computing (CSCW '15)*. ACM, New York, NY, 1882-1895. https://doi.org/10.1145/2675133.2675217 (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 and Crowdsourcing (HCOMP '14)*. AAAI, Palo Alto, CA, 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 Khabsa, 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, New York, NY, 105-112. https://doi.org/10.1109/ICWS.2014.27 (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 '14)*. ACM, New York, NY, 2975-2984. https://doi.org/10.1145/2556288.2557061 (23% acceptance rate)

  [Best Paper Honorable Mention Award (top 5%)]
- [C.7] Kyungsik Han, **Patrick C. Shih**, Mary Beth Rosson, and John M. Carroll. 2014. Enhancing community awareness of and participation in local heritage with a mobile application. In *Proceedings of the ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW '14)*. ACM, New York, NY, 1144-1155. https://doi.org/10.1145/2531602.2531640 (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, New York, NY, 199-208. https://doi.org/10.1145/2389176.2389207 (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, New York, NY, 1257-1266. https://doi.org/10.1145/2145204.2145393 (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 BCS Conference on Human-Computer Interaction (HCI '11)*. ACM, New York, NY, 269-278. https://doi.org/10.14236/ewic/HCI2011.56 (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 BCS Conference on Human-Computer Interaction (HCI '11)*. ACM, New York, NY, 74-83. https://doi.org/10.14236/ewic/HCI2011.30 (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, New York, NY, 363-370. https://doi.org/10.1145/1940761.1940811 (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, New York, NY, 139-148. https://doi.org/10.1145/1531674.1531696 (36% acceptance rate)

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

[c.12] Daehyoung Lee, **Patrick C. Shih**, Bogoan Kim, Kyungsik Han, Aehong Min, Donetta J. Cothran, Scott Bellini, and Georgia C. Frey. 2020. Objectively measured physical activity and sedentary time in adults with autism spectrum disorder. *Medicine and Science in Sports and Exercise* 52, 7S (July 2020), 290. http://doi.org/10.1249/01.mss.0000676752.92687.0f

- [c.11] Yuxing Wu, Elisa Krebs, Adithya Hassan Shankaranand, **Patrick C. Shih**, and Chia-Fang Chung. 2020. Meal Chat: Promoting mealtime social interaction for college students. In *Proceedings of Extended Abstracts of the ACM Conference on Human Factors in Computing Systems (CHI EA '20)*. ACM, New York, NY, LBW247, 1-8. https://doi.org/10.1145/3334480.3382822
- [c.10] K. Cassie Kresnye and **Patrick C. Shih**. 2020. Smart Habitat: A wildlife rehabilitation system. In *Proceedings of Extended Abstracts of the ACM Conference on Human Factors in Computing Systems (CHI EA '20)*. ACM, New York, NY, LBW015, 1-7. https://doi.org/10.1145/3334480.3383093
- [c.9] Juan F. Maestre, K. Cassie Kresnye, Julia C. Dunbar, Ciabhan Connelly, Katie A. Siek, and **Patrick C. Shih**. 2020. Conducting HCI research with people living with HIV remotely: Lessons learned and best practices. In *Proceedings of the Extended Abstracts of the ACM Conference on Human Factors in Computing Systems (CHI EA '20)*. ACM, New York, NY, CS05, 1-8. https://doi.org/10.1145/3334480.3375202 (30% acceptance rate)
- [c.8] Ashley M. Walker, Michael A. DeVito, Juan F. Maestre, Katie A. Siek, K. Cassie Kresnye, Ben Jelen, **Patrick C. Shih**, Maria Wolters, and Mona Alqassim. 2019. ARC: Moving the method forward. In *Proceedings of the Extended Abstracts of the ACM Conference on Human Factors in Computing Systems (CHI EA '19*). ACM, New York, NY, SIG06, 1-4. https://doi.org/10.1145/3290607.3311763
- [c.7] Yi-Han Hu, Dong-Chul Seo, **Patrick C. Shih**, and Hsien-Chang Lin. 2018. Social relationships, neighborhood disorder, and cognitive decline in elderly: Differences by living arrangement. *Innovation in Aging* 2, suppl\_1 (Nov. 2018), 999. https://doi.org/10.1093/geroni/igy031.3692
- [c.6] Austin Toombs, Laura Devendorf, Patrick C. Shih, Liz Kaziunas, David Nemer, Helena Mentis, and Laura Forlano. 2018. Sociotechnical systems of care. In Proceedings of the Companion Publication of the ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW Companion '18). ACM, New York, NY, 479-485. https://doi.org/10.1145/3272973.3273010
- [c.5] Juan F. Maestre, Elizabeth Eikey, Mark Warner, Jessica Pater, Maia Jacobs, Svetlana Yarosh, and **Patrick C. Shih**. 2018. Conducting research with stigmatized populations: Practices, challenges and lessons learned. In *Proceedings of the Companion Publication of the ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW Companion '18)*. ACM, New York, NY, 385-392. https://doi.org/10.1145/3272973.3273003
- [c.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, New York, NY, 343-346. https://doi.org/10.1145/2724660.2728689 (80% acceptance rate)
- [c.3] Yu Wu, Jessica Kropczynski, **Patrick C. Shih**, 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 and Social Computing (CSCW Companion '14).* ACM, New York, NY, 265-268. https://doi.org/10.1145/2556420.2556483
- [c.2] Kyungsik Han, **Patrick C. Shih**, and John M. Carroll. 2013. Aggregating community information to explore social connections. In *AAAI Technical Report WS-13-04*, *AAAI Conference on Weblogs and Social Media When the City Meets the Citizen Workshop (WCMCW@ICWSM '13)*. AAAI, Palo Alto, CA, 5-8.

[c.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, New York, NY, 11-20. https://doi.org/10.1145/2212776.2212779 (45% acceptance rate)

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

- [W.25] Alec A. Theisz, Megan Furness, Juan F. Maestre, Vaishnav Kameswaran, Tawanna R. Dillahunt, Tiffany Veinot, and **Patrick C. Shih**. 2020. Transportation practices of people living with HIV in rural areas. In *American Medical Informatics Association Annual Symposium Workshop on Interactive Systems in Health Care (WISH@AMIA '20)*.
- [W.24] Daehyoung Lee, Donetta J. Cothran, Scott Bellini, **Patrick C. Shih**, Kyungsik Han, Bogoan Kim, Aehong Min, Seungwon Paik, and Georgia C. Frey. 2020. Ecological momentary assessment of physical activity, sedentary time, and anxiety in adults with autism spectrum disorder. In *International Society for Autism Research 2020 Annual Meeting (INSAR '20)*.
- [W.23] Aehong Min, K. Cassie Kresnye, and Patrick C. Shih. 2019. A system of equine-assisted therapy: Stakeholders, practices, and issues. In *ACM Conference on Designing Interactive Systems Workshop on Exploring Noticing as Method in Design Research (ArtsOfNoticing@DIS'19)*.
- [W.22] Daehyoung Lee, John M. Kennedy, Donetta J. Cothran, **Patrick C. Shih**, Stephanie Dickinson, Lilian Golzarri-Arroyo, and Georgia C. Frey. 2019. Association between sedentary behavior and cardiovascular disease risk in adults with autism spectrum disorder. Poster presented at the *International Society of Behavioral Nutrition and Physical Activity 2019 Annual Meeting* (ISBNPA '19).
- [W.21] Aehong Min, Wendy R. Miller, Luis M. Rocha, Katy Börner, Rion Brattig Correia, and **Patrick C. Shih**. 2019. Understanding health information management of people with epilepsy and their caregivers. In *ACM Conference on Human Factors in Computing Systems Workshop on Interactive Systems in Health Care (WISH@CHI '19)*.
- [W.20] Daehyoung Lee, Donetta J. Cothran, John M. Kennedy, **Patrick C. Shih**, Lilian Golzarri-Arroyo, Stephanie Dickinson, and Georgia C. Frey. 2019. Association between physical activity, sedentary time, and technology use in adults with autism spectrum disorder. In *International Society for Autism Research 2019 Annual Meeting (INSAR '19)*.
- [W.19] Christina Colón, Anna N. Baglione, and **Patrick C. Shih**. 2019. The power of music therapy. Poster presented at the *2019 Scientista Symposium (SCISYMP '19)*.
- [W.18] Aehong Min, Flannery Currin, Gustavo Razo, Kay Connelly, and **Patrick C. Shih**. 2018. Characteristics of family and respite care. In *ACM Conference on Computer-Supportive Cooperative Work and Social Computing Workshop on Sociotechnical Systems of Care (Care@CSCW '18*).
- [W.17] Daehyoung Lee, John M. Kennedy, Donetta J. Cothran, Andrea K. Chomistek, **Patrick C. Shih**, Aehong Min, and Georgia C. Frey. 2018. Physical activity, sedentary behavior, and mobile technology use in adults with disabilities: A survey study. Oral presentation at the *North American Federation of Adapted Physical Activity Symposium (NAFAPA '18)*.
- [W.16] Daehyoung Lee, **Patrick C. Shih**, Scott Bellini, Aehong Min, Donetta J. Cothran, and Georgia C. Frey. 2018. Iterative development of a technology-guided intervention to increase physical activity in adults with autism spectrum disorder. 40 minutes Mini Lecture at the *North American Federation of Adapted Physical Activity Symposium (NAFAPA '18*).
- [W.15] **Patrick C. Shih**. 2018. Supporting scientific work using end-user data analytics. In *Consortium* for the Science of Sociotechnical Systems Decennial Sociotech Futures Symposium (CSST '18).
- [W.14] Tom Ongwere, Gabrielle Cantor, **Patrick C. Shih**, James Clawson, and Kay Connelly. 2018. Designing for patients with type-2 diabetes and discordant chronic comorbidities using ICDMI model guidelines. Poster presented at the *Consumer Health Informatics in the Midwest (CHIM '18)*.

[W.13] Aehong Min, Daehyoung Lee, Gege Gao, Anurag Jain, Pratik Jain, Stella Jeong, and **Patrick C. Shih**. 2018. Potentials of smart breathalyzer: Interventions for excessive drinking among college students. Poster presented at the *Consumer Health Informatics in the Midwest (CHIM '18)*.

- [W.12] Juan F. Maestre and **Patrick C. Shih**. 2018. Conducting research with the stigmatized. Poster presented at the *Consumer Health Informatics in the Midwest (CHIM '18)*.
- [W.11] 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. In *American Medical Informatics Association Annual Symposium Workshop on Interactive Systems in Health Care (WISH@AMIA '17).*
- [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. In *American Medical Informatics Association Annual Symposium Workshop on Interactive Systems in Health Care (WISH@AMIA '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. In *American Medical Informatics Association Annual Symposium Workshop on Interactive Systems in Health Care (WISH@AMIA '17)*.
- [W.8] Julia C. Dunbar, Ciabhan L. Connelly, Juan F. Maestre, Haley MacLeod, Katie A. Siek, and **Patrick C. Shih**. 2017. Considerations for using the Asynchronous Remote Communities (ARC) method in health informatics research. In *American Medical Informatics Association Annual Symposium Workshop on Interactive Systems in Health Care (WISH@AMIA '17)*.
- [W.7] 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.6] Jessica Kropczynski,, Joshua DiCaglio, Joseph Johnson, and **Patrick C. Shih**. 2016. Situated Environmental Awareness. In *Consortium for the Science of Sociotechnical Systems Researchers Summer Research Institute (CSST '16)*.
- [W.5] Kyungsik Han, Kristin Cook, and **Patrick C. Shih**. 2016. Exploring effective decision making through human-centered and computational intelligence methods. In *ACM Conference on Human Factors in Computing Systems Workshop on Human Centered Machine Learning (HCML@CHI '16)*.
- [W.4] **Patrick C. Shih** and Christena Nippert-Eng. 2016. From Quantified Self to Quantified Other: Engaging the public on promoting animal well-being. In *ACM Conference on Human Factors in Computing Systems Workshop on HCI Goes to the Zoo (ZooTech@CHI '16*).
- [W.3] Sarah-Alice Hanna, Jessica Kropczynski, **Patrick C. Shih**, and John M. Carroll. 2015. Using a mobile application to encourage community interactions at a local event. In *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. In *Collective Intelligence Conference (CI '14)*.
- [W.1] **Patrick C. Shih** and Gary M. Olson. 2009. Using visualization to support idea generation in context. In *ACM Conference on Creativity and Cognition Workshop on Creativity and cognition in engineering design: Theoretical and pedagogical issues (CCED@C&C '09).*

### **Patents**

[PT.1] Kean G. Kuiper, Frank E. Levine, Enio M. Pineda, and **Patrick C. Shih**. 2010. Call stack sampling for a multi-processor system. (Jan. 2010). Patent No. US 2010/0017583 A1, Filed July 15, 2008, Issued Jan. 21, 2010.

### **Dissertation and Thesis**

- [T.2] **Patrick C. Shih**. 2011. Brainstorming Beyond the Laboratory: Idea Generation Practices in Software Development Firms. Ph.D. Dissertation. University of California, Irvine, Irvine, CA. UMI Order Number: 3490146.
- [T.1] **Patrick C. Shih.** 2005. *Fault-Tolerance for Distributed Publish-Subscribe Systems*. Master's thesis. Carnegie Mellon University, Pittsburgh, PA. OCLC 320526509.

### **Invited Presentations**

[P.19] "Using Technologies to Amplify the Capabilities of Human-Animal Interaction." Keynote speaker at the GT-IDEA Roundtable and Data Jam Conference. February 26, 2021.

- [P.18] "Animal Computer Interaction." Luddy Summer Virtual Event Series. July 30, 2020.
- [P.17] "Using Technologies to Amplify the Capabilities of Human-Animal Interaction." International Summer School on Animal-Centered Computing, Saint Petersburg Electrotechnical University. July 25, 2020.
- [P.16] "Using Technologies to Amplify the Capabilities of Human-Animal Interaction." Indiana HCI Fest, Indiana University. December 5, 2019.
- [P.15] "What's Next: Advancing the Vietnam War/American War Oral History Project." Digital Library Brown Bag Series, Indiana University. January 23, 2019.
- [P.14] "Combining personal data analytics and community-based interventions to support physical and mental wellbeing." School of Computing and Information Systems, University of Melbourne.

  March 20, 2018.
- [P.13] "Combining personal data analytics and community-based interventions to support physical and mental wellbeing." School of Information Technology and Electrical Engineering, University of Queensland. March 14, 2018.
- [P.12] "From Quantified Self to Quantified Other." Department of Computer Science, The University of Texas Rio Grande Valley. October 27, 2017.
- [P.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.
- [P.10] "Toward Personalized Machine Learning: Fine-tuning Personalized Activity and Behavioral Data with End-User Interactive Visualization." Pacific Northwest National Laboratory. June 23, 2016.
- [P.9] "Temporal and Comparative Analysis of Teen and Adult Behaviors on Instagram." Intelligent & Interactive Systems Talk Series, Indiana University Bloomington. April 27, 2016.
- [P.8] "Supporting Civic Activities with Machine and Human Computation." School of Computing, Clemson University. February 13, 2015.
- [P.7] "Supporting Civic Activities with Machine and Human Computation." Department of Information and Library Science, Indiana University Bloomington. February 4, 2015.
- [P.6] "Supporting Civic Activities with Machine and Human Computation." Department of Information Systems, University of Maryland, Baltimore County. January 17, 2015.
- [P.5] "Supporting Civic Activities with Machine and Human Computation." Department of Computer Science, University of Bath. January 5, 2015.
- [P.4] "Supporting Civic Activities with Machine and Human Computation." Institute of Information Systems and Applications, National Tsing Hua University. December 17, 2014.
- [P.3] "Supporting Civic Activities with Machine and Human Computation." School of Computing, University of Leeds. December 15, 2014.
- [P.2] "Usability and Bad Design." Human factors and Ergonomics Society, The Pennsylvania State University. February 10, 2014.
- [P.1] "Technology in Use: Notes from the Field." Teaching Community Seminar, The Pennsylvania State University. February 27, 2013.

# **Media Coverage and Interviews**

- [M.31] "Luddy faculty earn prestigious recognition from Association for Computing Machinery." Luddy News. January 15, 2021.
- [M.30] "Shih honored as ACM Senior Member." Luddy News. January 15, 2021.
- [M.29] "Grief support systems have been wrecked by COVID-19." The Verge. April 1, 2020.
- [M.28] "IU Researcher Creates Health App to Aid Those on Autism Spectrum." Bloom Magazine. March 29, 2020.
- [M.27] "Shih earns NSF grant to develop and evaluate shared mobility system for underserved communities." Luddy News. November 12, 2019.
- [M.26] "Ph.D. candidate creates gamified health app." Indiana Daily Student. November 12, 2019.
- [M.25] "IU Student spends his summer with LSAMP research program developing an app for animal-assisted therapy." IU Engaged Learning. August 1, 2019.

[M.24] "Eight SICE faculty earn Trustees Teaching Awards from IU." Luddy News. April 29, 2019.

- [M.23] "SICE researchers earn honors at CHI 2019." Luddy News. April 18, 2019.
- [M.22] "SICE researchers to present at NordiCHI 2018." Luddy News. September 12, 2018.
- [M.21] "Symposium highlights study of perspectives on Vietnam War." Luddy News. August 9, 2018.
- [M.20] "SICE researchers showcased at CHI2018." Luddy News. March 23, 2018.
- [M.19] "How to Make Sure Your Activity Tracker Isn't a Waste of Money." PolicyGenius. January 12, 2018.
- [M.18] "Two IGI Global Titles Receive Awards." IGI Global News. June 8, 2017.
- [M.17] "[인천 실향민 70 명 임진각 방문] '고향땅 저 앞인데... 왜 갈 수 없나.' " Gyeongin Daily, Gyeonggido, 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." Luddy News. January 22, 2016.
- [M.13] "ILS Welcomes Three New Faculty." Luddy 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." Linkdex. 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

I have taught 15 courses (10 graduate level; 5 undergraduate level) with a total of 315 students (136 graduate level; 179 undergraduate level); given 15 guest lectures; served as a teaching assistant for 6 courses (2 graduate level; 4 undergraduate level).

# **Indiana University Bloomington**

# [2018 - 2019 Indiana University Trustees Teaching Award]

Instructor INFO-I 513 INFO-I 413	Usable Artificial Intelligence Course Rating (1-4): TBA	Class Size: TBA Instructor Rating (1	Spring 2021 -4): TBA
INFO-I 527	Mobile and Pervasive Design (Cross-listed)	Class Size: 18	Fall 2020
CSCI-P 535	CSCI-P 535 Pervasive Computing (Cross-listed) Course Rating (1-4): 3.6		-4): 4.0
INFO-I 590 INFO-I 400	Topics in Informatics: Usable Artificial Intelligence Course Rating (1-4): 3.5	Class Size: 14 Instructor Rating (1	Spring 2020 -4): 4.0
INFO-I 527 CSCI-P 535	Mobile and Pervasive Design (Cross-listed) Pervasive Computing (Cross-listed) Course Rating (1-4): 3.1	Class Size: 22 Instructor Rating (1	Fall 2019
			-4): 2.9
INFO-I 590	Topics in Informatics: Seminar in Animal-Computer Int		Eall ages
INFO-I 400	Co-Instructor: Christena Nippert-Eng Course Rating (1-4): 4.0	Class Size: 6 Instructor Rating (1	Fall 2019 -4): 4.0
	6001300 1100113 (2 4), 4,0		47. 4.0
INFO-I 527 CSCI-P 535	Mobile and Pervasive Design (Cross-listed) Pervasive Computing (Cross-listed)	Class Size: 8	Fall 2018
	Course Rating (1-4): 4.0	Instructor Rating (1	-4): 3.9
INFO-I 590	Topics in Informatics: Seminar in Animal-Computer Int	eraction	
INFO-I 400	Co-Instructor: Christena Nippert-Eng	Class Size: 17	Fall 2018
	Course Rating (1-4): 3.8	Instructor Rating (1	-4): 4.0
UNIV 184R	Bridge to Informatics (DePauw University)	Class Size: 17	Spring 2018
	Course Rating (1-7): 5.64	Instructor Rating (1	-7): 5.29
INFO-I 527	Mobile and Pervasive Design (Cross-listed)	Class Size: 25	Fall 2017
CSCI-P 535	Pervasive Computing (Cross-listed) Course Rating (1-4): 3.5	Instructor Rating (1	-4): 3.7
	[Fall 2017 IU Project and Research Symposium "		
	Good" Award] [Fall 2017 IU Project and Research Symposium "	People's Choice"	
		•	
UNIV 184G	Bridge to Informatics (DePauw University)	Class Size: 13	Spring 2017
ILS-Z 516	Course Rating (1-7): 6.55 Human-Computer Interaction	Instructor Rating (1 Class Size: 23	Fall 2016
120 2 010	Course Rating (1-4): 2.4	Instructor Rating (1	
ILS-Z 604		T.7 1	ol o. (
	Social Computing and Computer-Supported Cooperative Spring 2016	e Work	Class Size: 6

Patrick C. Shih **Curriculum Vitae** ILS-Z 516 **Human-Computer Interaction** Class Size: 26 Fall 2015 Co-Instructor: Younei Soe Course Rating (1-4): 2.9 Instructor Rating (1-4): 2.8 **Guest Lecturer** Current Issues in Undergraduate Life (Stemming into IU) EDUC-U 212 Fall 2020 Instructors: Kim M. Jenkins, Corryn Anderson INFO-I 101 **Introduction to Informatics and Computing** Fall 2020 Instructors: Katie A. Siek, Chase McCov, Logan Paul INFO-I 407 **Introduction to Health Informatics** Fall 2015, 2016, 2017, 2018, 2020 **INFO-I 507 Instructor: Kay Connelly** Introduction to HCI/d Fall 2020 INFO-I 541 Instructor: Eli B. Blevis INFO-I 400 Seminar in Animal-Computer Interaction Fall 2020 Instructor: Christena Nippert-Eng INFO-I 590 INFO-I 400 **Cross-Platform Mobile Programming** Fall 2019 Instructor: Christina Chung Introduction to Health Informatics INFO-I 407 Fall 2019 Instructor: Dana Habeeb **INFO-I 507** ILS-Z 586 **Digital Curation** Fall 2016 Instructor: Devan Donaldson **Human-Computer Interaction** Spring 2016 ILS-Z 516 Instructor: Younei Soe Bridge to Informatics (DePauw University) UNIV 184D Spring 2016 Instructor: Katie A. Siek Introduction to Doctoral Research in Information Science. ILS-Z 701 Fall 2015 Instructors: Howard Rosenbaum and Pnina Fichman The Pennsylvania State University Instructor IST 413 **Usability Engineering** Class Size: 39 Fall 2014 Instructor Rating (1-7): 5.71 Course Rating (1-7): 5.59 [2014 - 2015 1000 Pitches Summit finalist in "Mobile Apps" category (top 9 out of 1083)] IST 413 **Usability Engineering** Class Size: 39 Spring 2014 Instructor Rating (1-7): 5.76 Course Rating (1-7): 5.24 IST 413 **Usability Engineering** Class Size: 42 Spring 2013 Course Rating (1-7): 5.36 Instructor Rating (1-7): 5.64 **Guest Lecturer** Digital Design and Innovation Spring 2015 IST 473 Instructor: Lisa (Lee) B. Erickson Organization and Design of Information Systems: User & System Principles IST 331 Spring 2012 Instructor: Frank E. Ritter

Page 18 of 28

IST 522 IST 522 Models, Theories and Frameworks of HCI Spring 2012

Instructor: John M. Carroll

IST 521 IST 521 Human Computer Interaction: The User and Technology Spring 2012

Instructor: Mary Beth Rosson

University of California, Irvine

Teaching Assistant

ICS 52 Introduction to Software Engineering Winter 2008

Instructor: Ban Al-Ani TA Rating (1-9): 8.50

ICS 139W Communications Skills for Computer Scientists Fall 2007

Instructor: Venita De Souza TA Rating (1-9): 8.09

**Project Mentor** 

INF 190 Ubicomp Projects Winter 2008

Instructor: Gillian R. Hayes

**Guest Lecturer** 

INF 131 Human Computer Interaction Summer 2009

Instructor: Yang Wang

**Carnegie Mellon University** 

Teaching Assistant

18-342 Fundamentals of Embedded Systems Fall 2004

Instructors: Priya Narasimhan, Rajeev Gandhi

TA Rating (1-9): 8.22

[Best Teaching Assistant Award Finalist]

18-845 18-845 Internet Services Spring 2004

Instructor: David O'Hallaron

TA Rating (1-9): 8.77

# Patrick C. Shih

### PROFESSIONAL SERVICE

**Steering Committee** 

Human Computer Interaction Consortium (HCIC) Governing Board Since 2020 Saint Petersburg Electrotechnical University (LETI) Animal-Centered Computing Scientific Board

Since 2020

International Conference on Animal-Computer Interaction (ACI) Institute for Digital Arts and Humanities (IDAH)

Since 2018

Since 2017

**Conference and Symposium Chair** 

Patrick C. Shih. 2021. Animal-Computer Interaction (ACI '21).

Patrick C. Shih and Ronald Osgood (Eds.). 2018. Vietnam War/American War Stories: A Symposium on Conflict and Civic Engagement.

### **Program Chair**

Patrick C. Shih. 2020. Animal-Computer Interaction (ACI '20).

Patrick C. Shih and Juan Haladjian (Eds.). 2019. Animal-Computer Interaction (ACI '19).

Starr Roxanne Hiltz, Mark S. Pfaff, Linda Plotnick, and Patrick C. Shih (Eds.). 2014. Information Sustems for Crisis Response and Management (ISCRAM '14).

# **Workshops Co-Chair**

Patrick C. Shih. 2022. ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW '22).

# **Workshops and Panels**

Juan F. Maestre, Elizabeth Eikey, Mark Warner, Jessica Pater, Maia Jacobs, Svetlana Yarosh, and Patrick C. Shih. 2018. ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW '18): Workshop on Conducting Research with Stigmatized Populations: Practices, Challenges and Lessons Learned.

Austin Toombs, Laura Devendorf, Patrick C. Shih, Liz Kaziunas, David Nemer, Helena Mentis, and Laura Forlano. 2018. ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW '18): Workshop on Sociotechnical Systems of Care.

Christena Nippert-Eng and Patrick C. Shih (Eds.). Annual Meeting of the Society for Social Studies of Science (4S '18). Panel on Animals and Technology Around the World, Past and Present.

#### **Journal Associate Editors**

Frontiers in Digital Health (FDGTH)

Since 2020

International Journal of Crisis Response and Management (IJCRAM)

2020

#### Journal Editorial Review Board

Proceedings of the ACM on Human-Computer Interaction, Computer-Supported Cooperative Work and Social Computing (PACMHCI-CSCW) 2018-1st, 2018-2nd, 2020

Proceedings of the ACM on Human-Computer Interaction, Supporting Group Work (PACMHCI-GROUP)

2020-1st, 2020-2nd, 2022

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

2016 - 2020

### **Conference Program Committee**

### [\* Special Recognitions for Outstanding Reviews]

Human Factors in Computing Systems (CHI)	2016, 2018, <b>2021</b> *
Computer Supported Cooperative Work and Social Computing (CSCW)	2015, 2018, 2020
Designing Interactive Systems (DIS)	2016, 2019, <b>2020</b> *
Pervasive Computing Technologies for Healthcare (PervasiveHealth)	2018, 2019, 2020
Supporting Group Work (GROUP)	2018, 2020, 2022
iConference (iConf)	2015, 2016, 2019

**Human Factors in Computing Systems:** 

Bridging a Bridge: Bringing Two HCI Communities Together Workshop Human Factors in Computing Systems Late-Breaking Work (CHI LBW) Human-Computer Interaction with Mobile Devices and Services (MobileHCI Web Science (WebSci) Chinese CHI (Chinese CHI) 2015, Mobile Systems and Pervasive Computing (MobiSPC) Annual Meeting of the Association for Information Science and Technology (Digital Transformation & Global Society (DTGS) Information Systems for Crisis Response and Management (ISCRAM) Human-Centered Computing (HCC) Presence (ISPR)	2017 (1) 2018 2016, 2017, 2018 2016, 2017, 2018, 2019, 2020 2017, 2018
<b>Grant Panelist and Reviewer</b>	
	2016, 2017, 2018, 2020, 2021
National Science Foundation (NSF) Reviewer	2015, 2019
11410141 0010100 1 0411441011 (2101) 1101101101	==10, ==1)
Journal Paper Reviewer	
Frontiers in Computer Science (FCOMP)	2020
International Journal of Human-Computer Studies (IJHCS)	2015, 2017, 2019
PeerJ Computer Science (PeerJ CS)	2016, 2019
Proceedings of the ACM on Human-Computer Interaction (PACMHCI-CSCW	
Student Reviewer Program Mentor	2019
Behaviour & Information Technology	2019
Health Informatics Journal	2019
ACM Transactions on Computer-Human Interaction (TOCHI)	2017, 2018, 2020
Communications of the ACM	2017, 2018
Journal of International Humanitarian Action	2018
Information	2018
International Journal of Environmental Research and Public Health (IJERPI	H) 2015, 2017
PLOS ONE .	2016
Interacting with Computers (IwC)	2016
Information, Communication & Society (ICS)	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**

# [\* Special Recognitions for Outstanding Reviews]

Human Factors in Computing Systems (CHI) 2011, 2012, 2013,	2014, 2015, <b>2017</b> *, 2019, <b>2020</b> *
Computer Supported Cooperative Work and Social Computing (CSCW)	2012, 2013, 2014, <b>2016*</b> , 2017
Designing Interactive Systems (DIS)	<b>2017</b> *, 2018
iConference (iConf)	2017, 2018, 2020, 2021
Human-Computer Interaction with Mobile Devices and Services (Mobile	HCI) 2020
Computer Supported Collaborative Learning (CSCL)	2015, 2017, 2019
Workshop on Interactive Systems in Healthcare (WISH)	2013, 2020
Hawaii International Conference on System Sciences (HICSS)	2017, 2019
Australian Conference on Computer-Human Interaction (OZCHI)	2017, 2018
European Conference on Information Systems (ECIS)	2018
International Conference on Human-Computer Interaction (INTERACT)	2017
Interactive Surfaces and Spaces (ISS)	2017
Pervasive and Ubiquitous Computing (UbiComp)	2016

Patrick C. Shih	Curriculum Vitae
International Conference on Information Systems (ICIS) Creativity and Cognition (C&C) International Symposium on Wearable Computers (ISWC)	2016 2015 2015
Americas Conference on Information Systems (AMCIS)	2015
Best Paper Award Committee iConference (iConf)	2019
<b>Doctoral Consortium Committee</b> Annual Meeting of the Association for Information Science and Technology (AS	SIS&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 Chair Human Factors in Computing Systems (CHI) iConference (iConf)	2016, 2017 2015, 2016
Student Volunteer Chair Computer Supported Cooperative Work and Social Computing (CSCW)	2011
Student Volunteer Computer Supported Cooperative Work and Social Computing (CSCW) Supporting Group Work (GROUP)	2008, 2010 Team Leader 2009
ACADEMIC SERVICE	
Indiana University Bloomington	
Campus-level Service Institute for Digital Arts and Humanities (IDAH) Steering Committee Institute for Digital Arts and Humanities (IDAH) Research and Pedagogy Advo	Since 2017 ecacy Subcommittee Since 2017
Bloomington Faculty Council-Creation, Reorganization, Elimination, and Merg CREM)	
Bloomington Faculty Council (BFC) Bloomington Faculty Council—Faculty Affairs Committee (BFC-FAC)	2016 - 2019 2016 - 2019 2016 - 2018
School-level Service Luddy Director of Graduate Studies for Data Science Luddy Human Computer Interaction Consortium (HCIC) Coordinator Luddy CHI Writing Workshop Organizer Luddy Scholarship Committee Luddy Director of Dean's External Affairs Search Committee Luddy Web Development Manager Search Committee Luddy Director of Computing Outreach Education Search Committee Luddy Spring Projects and Research Symposium Judge Luddy Fall Projects and Research Symposium Judge	Since 2020 2016 – 2018, Since 2020 2016 – 2019 2017 – 2018 2017 – 2018 2016 – 2017 2016 – 2017 2015 – 2017 2015 – 2017

Department-level Service	
INFO PhD and MS Animal Informatics Track Co-Director	Since 2020
INFO PhD Minor in Animal-Computer Interaction Co-Director	Since 2020
INFO BS Cognate/Minor in Animal-Computer Interaction Co-Director	Since 2020
INFO Animal Informatics 4+1 BS/MS Curriculum Development	Since 2020
INFO Honors Program Curriculum Committee	Since 2019
INFO Proactive Health Informatics Space Coordinator	Since 2017
INFO PhD and MS Animal Informatics Track Curriculum Development	2016 - 2020
INFO PhD Minor in Animal-Computer Interaction Curriculum Development	2016 – 2020
INFO BS Cognate/Minor in Animal-Computer Interaction Curriculum Development	2016 – 2020
INFO Lecturer in Informatics Program Search Committee	2017 – 2018
INFO HCI/Interaction Design, Course Coordinator	2016 – 2017
INFO Proactive Health Informatics Faculty Search Committee	2015 – 2016
ILS MIS and MLS Social Computing Specialization Director	2015 – 2016
ILS Graduate Admission and Scholarship Committee	2015 – 2016
ILS Graduate Programs Subcommittee on MIS Curriculum	2015 – 2016
The Pennsylvania State University	
Campus-level Service	
Postdoc Research Exhibition, Judge	2013 - 2015
College of Engineering Research Symposium Judge	2013 - 2014
Graduate Student Research Exhibition Judge	2012 – 2014
School-level Service	
IST Scholarship Committee	2014 - 2015
IST Awards Committee	2014 - 2015
IST College Assessment Committee	2014 - 2015
IST Web Committee	2012 - 2015
IST Human Computer Interaction Curriculum Committee	2012 - 2015
IST Human Computer Interaction Special Interests Group	2012 - 2015
IST Undergraduate Commencement Ceremony Faculty-at-large	2012 – 2014
University of California, Irvine	
UC Irvine Informatics Graduate Student Association Board Committee and Social Chair	2010 – 2011
University of California, Los Angeles	
Engineering Society of UCLA (ESUC) Junior Class Representative	2002 - 2003
IEEE Micromouse Team Officer	2001 - 2002
Eta Kappa Nu National Engineering Honor Society Project Committee	2001 - 2002
Tau Beta Pi National Engineering Honor Society Resume Book Committee Chair	2001 – 2002
MEMBERSHIP	
ACM Senior Member (top 25% of ACM)	Since 2020
ACM Lifetime Member	Since 2015

### **MENTORSHIP**

I supervised 46 undergraduate (24 females, 18 underrepresented) research projects including 14 NSF REUs (8 females, 4 underrepresented); advised 1 postdoc (1 female); advised 5 PhD students (4 females, 1 underrepresented); served on 14 Ph.D. student committees (5 females, 1 underrepresented); supervised additional 12 Ph.D. (5 females) and 31 M.S. (11 females, 1 underrepresented) graduate independent projects.

### **Indiana University Bloomington**

# [2018 – 2019 IU Groups Scholars Program STEM Mentor of the Year] [2016 – 2017 IU Office of Mentoring Services and Leadership Development Award]

CS = Computer Science

DS = Data Science

ILS = Information and Library Science

INFO = Informatics

ISE = Intelligent Systems Engineering

### Postdoc (1 postdoc, 1 female)

Hong Qiao (Shandong Normal University, School of Management Science and Engineering) 2015 – 2018

### **Doctoral Students**

Advisory Committee = Pre-candidacy Committee Research Committee = Dissertation Committee Doctoral Committee = External Dissertation Committee

Chair (5 students, 4 females, 1 underrepresented)

K. Cassie Kresnye
Advisory 2017 – 2020; Research Since 2020
Aehong Min
Advisory 2016 – 2019; Research Since 2019
Juan Fernando Maestre
Advisory 2015 – 2018; Research Since 2018
Gege Gao
Advisory 2016 – 2019
Anna N. Baglione
Advisory 2016 – 2018

Committee Member (14 students, 5 females, 1 underrepresented)

Patrick T. S. Lai (IUPUI: INFO) Research Since 2020 Tom Ongwere (INFO Health, HCI Minor Advisor) Advisory 2016 – 2020; Research Since 2020 Shengnan Yang (ILS) Advisory 2015 - 2019; Research Since 2019 Andreas Bueckle (ILS, INFO Minor Advisor) Advisory 2015 - 2018; Research Since 2018 Anna N. Baglione (University of Virginia; Systems Engineering) Doctoral Since 2018 Zhi Wang (Applied Health Science, DS Minor Advisor) Research 2019 - 2020 Cedomir Stanojevic (Recreation, Park, and Tourism Studies, INFO Minor Advisor) Advisory 2019 – 2020 Daehyoung Lee (Kinesiology, INFO Minor Advisor) Advisory 2016 – 2019; Research 2019 – 2020 Sanchari Das (INFO Privacy) Independent Study 2017 – 2018; Research 2018 – 2020 Lucas Cook (INFO CCS) Advisory 2017 - 2018; Research 2018 - 2020 Yi-Han Hu (Applied Health Science, INFO Minor Advisor) Advisory 2017 – 2018; Research 2018 – 2019 Dahee Chung (ILS) Research 2015 - 2017 Sara Tena Garcia (Universidad Carlos III de Madrid; CS and Technology) Doctoral 2013 - 2016

Independent Study Advisor (7 students, 2 females)

Swapna Chandrashekhar Joshi (INFO CCS)Since 2017Zheng Gao (ILS)2015 – 2019Jacob Norman Hagstrom (History)2017 – 2018Stephen Sher (INFO)2017 – 2018

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Patrick C. Shih	Curriculum Vitae
Vincent Malic (ILS) Pei-Ying Chen (ILS) Chase Matthew McCoy (ILS)	2015 - 2018 2015 - 2017 2015 - 2016
International Exchange Program Advisor (1 student) Bogoan Kim (Ajou University, Artificial Intelligence)	Summer 2019
Master's Students	
Independent Study Advisor (26 students, 8 females) Bhakti Sunil Narvekar (CS) Sonia Ashok Kargutkar (CS) Daksha Maruti Nagre (CS) Ishita Kumar (CS) Sairaj Rajendra Gaonkar (CS) Kaustubh Dattatraya Bhalerao (CS) Suyash Santosh Poredi (CS) Manuja Sanjay Bandal (CS) Rushabh Shah (DS) Jashjeet Singh Madan (DS) Sumeet Sarode (DS) Yash Kumar (DS) Biraj Ketan Parikh (DS) Senthil Esakkiappan (DS) Harish Maruthi (CS) Sai Rohith Achanta (CS) Mike Szakaly (INFO) Zackary Jones (Master of Fine Arts: Graphic Design) Jaeson Jackson (Media: Design and Production) Eric Johannes Blom (Media: Journalism) Jinsu Kim (DS) Gurleen Dhody (CS) Revathy Sridharan (ILS) Rounak Choudhary (ILS) Yu-Chen Huang (ILS)	2020 - 2021 $2020 - 2021$ $2020 - 2021$ $2020 - 2021$ $2020 - 2021$ $2020 - 2021$ $2020 - 2021$ $2020 - 2021$ $2020 - 2021$ $2020 - 2021$ $2020 - 2021$ $2020 - 2021$ $2020 - 2021$ $2020 - 2021$ $2020 - 2021$ $2019 - 2020$ $2019 - 2020$ $2019 - 2020$ $2018 - 2019$ $2017 - 2018$ $2017 - 2018$ $2017 - 2018$ $2017 - 2018$ $2017 - 2018$ $2017 - 2018$ $2015 - 2017$ $2015 - 2017$
International Exchange Program Advisor (1 student) Seungwon Paik (Ajou University, Software and Computer Engineering)	Summer 2019

# Undergraduate Students (39 students, 22 females, 18 underrepresented)

CEW&T = Emerging Scholars Research Experiences for Undergraduate Women

Cox = Cox Research Scholars Program

FMI = Faculty Mentoring Initiatives

Groups = Groups STEM Mentoring Program

IND = Independent Study

IUUR = IU Undergraduate Research

LSAMP = Indiana STEM Louis Stokes Alliance for Minority Participation

NSF REU = NSF Research Opportunities for Undergraduates

RSCP = Research Scholars Cohort Program

SREP = Groups STEM Summer Research Experience Program

UROC = Undergraduate Research Opportunities in Computing

Oliver Melbourne Allen (INFO)

Kenneth Harper (INFO)

Samantha Rasmussen (CS)

Mia Gallardo (Astronomy and Astrophysics)

NSF REU Since 2021

NSF REU Since 2021

CEW&T Since 2020

SREP Summer 2020; CEW&T Since 2020

Dara Groves (Psychology) SREP Summer 2020; IUUR Since 2020 Cristian A. Villanueva (INFO) RSCP 2019 - 2020; LSAMP Summer 2020; IUUR Since 2020 Alec Andrew Andrew Theisz (INFO) NSF REU Summer 2020; Cox Since 2018 Megan Furness (Biochemistry) CEW&T 2019 – 2020; NSF REU Summer 2020, Since 2020 Christina Colón (INFO) SREP Summer 2018; RSCP 2019 – 2020; Groups Since 2018; IUUR Since 2020 Alex M. Lutz (INFO) B.S. Thesis 2019 - 2020 Iesha M. Young (INFO) CEW&T, RSCP 2019 - 2020 Annie Phelps (Biology) CEW&T 2018 - 2019; IND 2019 - 2020 Lilia Jacqui Garcia (Neuroscience) SREP Summer 2020 Jamie Russell (INFO) IND 2019 - 2020 Isaac Navarrete (ISE) Groups 2019 - 2020 JeVante Qaiyim (CS) LSAMP Summer 2019; RSCP 2019 – 2020; Groups 2018 – 2020 Andy Zheng (INFO) FMI 2018 - 2019 Joshua Johnson (INFO) Groups 2018 - 2019 Alexa Spasevski (Cognitive Science) CEW&T 2018 - 2019 Jada Marshall (Information Systems) SREP Summer 2019 Gustavo Razo (UC Merced; Applied Mathematics) NSF REU Summer 2018; IND 2018 - 2019 Flannery Currin (Earlham College: CS, Psychology) NSF REU Summer 2018: IND 2018 - 2019 Justin Alexander (INFO) LSAMP Summer 2018 Meagan Price (Claflin University: Computer Engineering) NSF REU Summer 2017: IND 2017 - 2018 Ciabhan L. G. Connelly (Political Science and Government) NSF REU Summer 2017; IND 2017 - 2018 Julia Dunbar (Sienna College, CS) NSF REU Summer 2017; IND 2017 - 2018 Gabrielle S. Cantor (ISE) NSF REU Summer 2017; CEW&T 2017 - 2018 Saul Martinez Jr. (INFO) SREP Summer 2018 UROC 2017 - 2018 Rachel Sawchuk (CS) Hannah Blalock (Public Affairs, Nonprofit Management and Leadership) CEW&T 2017 - 2018 Cody Banister (CS) UROC 2016 - 2017; IND 2017 - 2018 Ali A. Talib (INFO) SREP Summer 2017 William Cole Smith (Physics) SREP Summer 2017 Maxine Marie Girard (Simmons College; CS) NSF REU Summer 2017 Sergio Ramirez Martin (Transylvania University; CS, Mathematics, Physics) NSF REU Summer 2017 Qian (Judy) Dai (CS) UROC 2016 - 2017 Lee Hiler (INFO) UROC 2015 - 2016; IND 2016 - 2017 Alize Dickey (Psychology) SREP Summer 2016 Marille Velez (Public Health, Community Health) SREP Summer 2016 Grace Bastin (INFO) NSF REU Summer 2016 Vanessa Pereira (INFO) NSF REU Summer 2016

### The Pennsylvania State University

CSE = Computer Science and Engineering IST = Information Sciences and Technology SRA = Security and Risk Analysis

### Doctoral Students (5 students, 3 females)

Kyungsik (Keith) Han (IST)
Saijing Zheng (IST)

Yu Wu (IST)
Sara Tena Garcia (Universidad Carlos III de Madrid; CS and Technology)
Jing Wang (IST)

Doctoral Mentor 2012 – 2013
Doctoral Mentor 2012 – 2013

### Master's Students (3 students, 2 females, 1 underrepresented)

Unsuk Heo (CSE)

Saloni J. D. Vaghela (IST)

Joslenne Pena (IST)

Independent Study Advisor 2014 – 2015

Master's Thesis Advisor 2014 – 2015

Master's Thesis Mentor 2013 – 2015

# Undergraduate Students (4 students, 2 females)

SURF = Summer Undergraduate Research Fellowship CRA-WP DREU = Distributed Research Experiences for Undergraduates

Brett Holden (SRA: Information and Cyber Security, Russian) Sarah-Alice Hanna (Barnard College; CS, Mathematics) Liam Neigh (IST, French and Francophones Studies) Diana Zhang (CSE) Honors Thesis Advisor 2014 – 2015 CRA-WP DREU Summer 2014 SURF Summer 2014 SURF Summer 2013

# University of California, Irvine

# Master's Students (1 student, 1 female)

Jana Schumann (Otto von Guericke University Magdeburg; Computational Visualistics)

Master's Thesis Mentor Summer 2011

# Undergraduate Students (1 student)

Sen Hirano (INFO)

Research Mentor Spring 2008

### REFERENCES

# **Christena Nippert-Eng**

Professor

Department of Informatics Indiana University Bloomington

Phone: +1 (812) 856-9829 E-mail: cnippert@indiana.edu

#### John M. Carroll

Distinguished Professor College of Information Sciences and Technology The Pennsylvania State University

Phone: +1 (814) 863-2476 E-mail: jcarroll@ist.psu.edu

# Gary M. Olson

Professor Emeritus<sup>1, 2</sup>
<sup>1</sup>Department of Informatics
University of California, Irvine
<sup>2</sup>School of Information
University of Michigan
Phone: +1 (949) 824-0077
E-mail: gary.olson@uci.edu

### **Mary Beth Rosson**

Professor

College of Information Sciences and Technology

The Pennsylvania State University

Phone: +1 (814) 863-3450 E-mail: mrosson@ist.psu.edu

### David F. Redmiles

Professor

Department of Informatics University of California, Irvine Phone: +1 (949) 824-3823 E-mail: redmiles@ics.uci.edu

#### **Judith S. Olson**

Professor Emeritus<sup>1, 2</sup>
<sup>1</sup>Department of Informatics
University of California, Irvine
<sup>2</sup>School of Information
University of Michigan
Phone: +1 (949) 824-0080
E-mail: jolson@uci.edu