

Cynthia Putnam

College of Computing and Digital Media
DePaul University
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Academic Positions

Associate Professor: Autumn 2016 to present
College of Computing and Digital Media | DePaul University, Chicago, Illinois

Assistant Professor: Autumn 2010 to 2016
College of Computing and Digital Media | DePaul University, Chicago, Illinois

Education

PhD Human Centered Design & Engineering, 2010

University of Washington | Seattle, Washington
Human Centered Design & Engineering
Advisors: Dr. Beth Kolko and Dr. Jennifer Turns (co-chairs)

M.S. Technical Communication, 2006

University of Washington | Seattle, Washington

B.S. Industrial Design, 1984

Western Washington University | Bellingham, Washington

Current research:

- Recommendations in diverse domains to help:
 - Parents, educators and therapists learn about and choose interactive technologies/toys for their children/students who have autism.
 - Therapists learn about and choose commercial games for their patients who have had a brain injury.
- User Experience (UX) Professionals and Pedagogy
 - Bridging the design/research dialogue gap by exploring methods UX professionals use to (a) investigate and (b) communicate about end-users.
 - How accessibility is taught, practiced and considered.

Publications

Refereed Journal Articles

[J.6] **Putnam, C.**, Dahman, M., Rose, E., Cheng, J., and Bradford, G. (2016). Best practices for Teaching Accessibility in Universities of Classrooms: Cultivating Awareness, Understanding and Appreciation for Diverse Users. *ACM Transactions on Accessible Computing*, 8(4), Article No. 13.

[J.5] **Putnam, C.**, Reiner, A., Ryou, E., Caputo, M., Cheng, J., Allen, M., Singamaneni, R. (2016). Human-Centered Design in Practice: Roles, Definitions, and Communication. *Journal of Technical Writing and Communication*, 46 (4), 446-470.

- [J.4] **Putnam, C.**, Cheng, J. & Seymour, G. (2014). Therapist Perspectives: Active Video Games Use in In-patient Settings for People with Brain-Injuries. *Games for Health Journal*, 3(6), 366-370.
- [J.3] Kolko, B, **Putnam, C.**, Johnson, & E. Rose, E. (2011). Reflection on research methodologies for ubicomp in developing contexts. *Personal and Ubiquitous Computing*, 15 (6), 575-583.
- [J.2] **Putnam, C.**, Johnson, E. Rose, E.& Kolko, B. (2009). Adapting User-Centered Design Methods to Design for Diverse Populations. *Special HCI4D Issue of Information Technologies and International Development (ITID)*, 5(4), 51-73.
- [J.1] Walton, R., **Putnam, C.**, Johnson, E.& Kolko, B. (2009). Skills Are Not Binary: Nuances in the Relationship Between ICT Skills and Employability. *Special ICT Skills and Employability Issue of Information Technologies and International Development (ITID)*, 5(2), 1-18.

Refereed Conference Proceedings

- [C.14] Cheng, J., Anderson, D., **Putnam, C.** and Guo, J. (2017). Leveraging Design Patterns to Support Designer-Therapist Collaboration When Ideating Brain Injury Therapy Games. In Proceedings of the Annual SIGCHI Annual Symposium on Computer-Human Interaction in Play, (CHI PLAY '17), October 15-18, Amsterdam, Netherlands.(Acceptance rate: 25%)
- [C.13] **Putnam, C.**, Cheng, J., Lin, F., Yalla, S., and Wu, S. (2016). 'Choose a Game': Creation and Evaluation of a Prototype Tool to Support Therapists in Brain Injury Rehabilitation. In Proceedings of 2016 Annual ACM Conference on Human factors in Computing systems (CHI '16), May 7-12, San Jose, CA, USA. (Acceptance rate: 23%)
- [C.12] Cheng, J., **Putnam C.**, and Guo J.. (2016). "Always a Tall Order": Values and Practices of Professional Game Designers of Serious Games for Health. In Proceedings of the Annual SIGCHI Annual Symposium on Computer-Human Interaction in Play, (CHI PLAY '16), October 16-19, Austin, TX, USA (Acceptance rate: 28%)
- [C.11] Cheng, J., **Putnam C.**, and Rusch, D. (2015). Towards Efficacy-Centered Game Design Patterns For Brain Injury Rehabilitation: A Data-Driven Approach. In Proceedings of the Annual ACM Conference on Conference on Computers and Accessibility, (ASSETS '15), October 26-28, Lisbon, Portugal. (Acceptance rate: 23%)
- [C.10] **Putnam, C.** and Cheng, J. (2014). Therapist-Centered Requirements: A Multi-Method Approach of Requirement Gathering to Support Rehabilitation Gaming. In Proceedings of International Conference on Requirements Engineering, (RE 2014), August 25-29, Kariskrona, Sweden. (Acceptance rate: 27%)
- [C.9] **Putnam, C.**, Wozniak, K., Zefeldt, M.J., Cheng, J., Caputo, M., and Duffield, C. (2012). How do professionals who create computing technologies consider accessibility? In Proceedings of the 14th Annual ACM Conference on Conference on Computers and Accessibility, (ASSETS '12), October 22 - 24, Boulder, CO, USA, (Acceptance rate 28%).

- [C.8] **Putnam, C.**, Kolko, B and Wood, S. (2012). Communicating about users in ICTD: leveraging HCI personas. In *Proceedings of International Conference on Information and Communication Technologies and Development*, (ICTD 2012), March 12-15, Atlanta, Georgia, USA. (Acceptance rate: 19%)
- [C.7] **Putnam, C.** and Kolko B. (2010). The Social Meaning of ICTs: Patterns of Technology Adoption and Usage in Context. In *Proceedings of International Conference on Information and Communication Technologies and Development*, (ICTD 2010), December 13-16, London, UK. (Acceptance rate: 14%).
- [C.6] Anderson, R.E., Brunette, W., Johnson, E., Lustig, C., Poon, A., **Putnam, C.**, Salihaeva, O., Kolko, B.E., & Borriello, G. (2010). Experiences with a Transportation Information System that Uses Only GPS and SMS. In *Proceedings of International Conference on Information and Communication Technologies and Development*, (ICTD 2010), December 13-16, London, UK. (Acceptance rate 18%)
- [C.5] Birge, C., **Putnam C.**, Kolko, B. (2010). Online Privacy Perception in Central Asia. In *Proceedings of the 6th Symposium on Usable Privacy and Security*, July 14-16, Redmond, WA, USA. (Acceptance rate 30%)
- [C.4] **Putnam, C** and Kolko B. (2009). Getting Online but still living offline: the complex relationship of technology adoption and in-person social networks. In *Proceedings of Advances in Social Networks and Mining*, (ASONAM '09), July 20-22, Athens, Greece. (Acceptance rate: 18%).
- [C.3] Putnam, C., Rose, E., Walton, R. & Kolko, B. (2009). Mobile phone users in Kyrgyzstan: A case study of identifying user requirements for diverse users. In *Proceedings of IPCC 2009*, July 20-23, Honolulu, Hawaii. (Acceptance rate: 33%)
- [C.2] Kolko, B. & **Putnam, C.** (2009). Computer Games in the Developing World: The Value of Non-Instrumental Engagement with ICTs, or Taking Play Seriously. In *Proceedings of International Conference on Information and Communication Technologies and Development*, (ICTD '09), April 17-19, Doha, Qatar. (Acceptance rate: 18%)
- [C.1] **Putnam, C.** and Chong, L. (2008). Software and technologies designed for people with autism. In *Proceedings of the 10th Annual ACM Conference on Conference on Computers and Accessibility*, (ASSETS '08), October 13 – 15, Halifax, Nova Scotia, Canada. (Acceptance rate: 36%).

Lightly Peer Reviewed: Abstracts, Posters, Demos and Workshops

- [A.11] Cheng, J. and **Putnam C.** (2017). Towards a Prototype Tool Leveraging Design Patterns to Support Design of Games for Brain Injury Therapy. In *Proceedings of the 2017 annual conference extended abstracts on Human factors in computing system*, (CHI EA '17), May 6-11, Denver, CO, USA. (Poster: Acceptance Rate: TBD%)
- [A.10] Cheng, J., **Putnam, C.** (2016). 'Choose a Game': A Prototype Tool to Support Therapists Use Games in Brain Injury Rehabilitation. Demonstration presented at *2016 annual conference on Human factors in computing system*, (CHI '16), May 7-12, San Jose, CA, USA. (Demo).

- [A.9] Schneider, K.L., Carter, J.S., **Putnam, C.**, Keeney, J., Decatur, D., Kern, D., & Aylward, L. (2016). Individual, interpersonal and game-experience correlates of active-video games in children. *Society for Behavioral Medicine Annual Meeting*, March 30-April 2, Washington DC. (Poster)
- [A.8] Cheng, J., **Putnam, C.**, and Rusch, D. (2015). 'Choose a Game': Creation and Evaluation of a Prototype Tool to Support Therapists in Brain Injury Rehabilitation." Demonstration presented at *Annual ACM Conference on Conference on Computers and Accessibility*, (ASSETS '15), October 26-28, Lisbon, Portugal. (Demo).
- [A.7] **Putnam C.**, Dahman M., Rose, E., Cheng, J., and Bradford, G. (2015). Teaching Accessibility, Learning Empathy. In *Proceedings of Annual ACM Conference on Conference on Computers and Accessibility*, (ASSETS '15), October 26-28, Lisbon, Portugal. (Poster: Acceptance Rate: 51%)
- [A.6] Cheng, J. and **Putnam C.** (2015). Therapeutic Gaming in Context: Observing Game Game Use for Brain Injury Rehabilitation. In *Proceedings of the 2015 annual conference extended abstracts on Human factors in computing system*, (CHI EA '15), April 18-23, Seoul, Korea. (Poster: Acceptance Rate: 41%)
- [A.5] Lin, F., **Putnam, C.**, Yalla, S.V. Cheng, J., Swaminathan, B., and Cotter, W. (2015). Using Motion-based Gaming to Improve Rehabilitation Outcomes in Veterans with Traumatic Brain Injuries, *VA Polytrauma Conference*, May 04-05, Washington DC.
- [A.4] **Putnam, C.** and Cheng, J. (2013). Therapist Perspectives: Motion-based Video Games Use In An In-patient Setting For Brain-Injured Patients. *Annual ACM Conference on Conference on Computers and Accessibility*, (ASSETS '13), October 21-23, Bellevue, WA, USA. (Poster: Acceptance Rate: 48%)
- [A.3] **Putnam, C.**, Cheng, J, Rusch, D, Berthiaume, A and Burke, R. (2013). Supporting Therapists in Motion Gaming for Brain Injury Rehabilitation. In *Proceedings of the 2013 annual conference extended abstracts on Human factors in computing system*, (CHI EA '13,) April 29-May 2, Paris, France. (Poster: Acceptance Rate: 46%)
- [A.2] Zagal, J, and **Putnam, C.** (2013). Teaching Games User Research. In *Proceedings of the 2013 annual conference extended abstracts on Human factors in computing system*, CHI EA '13, April 29-May 2, Paris, France. (CHI EA '13), Paris, France. April 27, 2013 (Workshop paper: Acceptance Rate: 20%)
- [A.1] **Putnam, C.** and Kolko, B. (2012). HCI Professions: Differences and definitions. In *Proceedings of the 2012 annual conference extended abstracts on Human factors in computing systems* (CHI EA '12), May 5-10, Austin, TX, USA. (Poster: Acceptance Rate: 48%)

Book Chapters

- [B.1] **Putnam, C.**, Zagal, J., and Cheng, J. (2015). You are Not the Player: Teaching Games User Research to Undergraduate Students. In *Usability Testing of Video Games: Multidisciplinary Case Studies*. Garcia-Ruiz, M. (eds). (Accepted: in press).

Other: Invited talks, Articles, and Colloquia

- [O.15] DePaul University (Research Colloquium): "AccessAbility: Exploratory Study Examining Documentaries Focused on Accessibility." Chicago, Illinois, May 2017.
- [O.14] Annual ACM Conference on Conference on Computers and Accessibility: Presentation of our journal article "Best Practices for Teaching Accessibility in Universities of Classrooms". October, 2016
- [O.13] DePaul University (Research Colloquium): "Choose a Game': Creation and Evaluation of a Prototype Tool to Support Therapists in Brain Injury Rehabilitation". January 22, 2016.
- [O.12] Game Developer Conference (GDC) Education Summit: "Setting Up and Running a Games User Research Class." March 17, 2014.
- [O.11] ACM SIGACCESS Newsletter: "Helping therapists make evidence-based decisions about motion gaming." October, 2013.
- [O.10] Games for Health Conference: "Supporting Therapists in Motion Gaming for Brain Injury Rehabilitation". Boston, Massachusetts, June 2013.
- [O.9] DePaul University (Research Colloquium): "Technology in non-western context: Technology use, adoption and diffusion in Central Asia." Chicago, Illinois, November 2011.
- [O.8] University of Oregon: "Bridging the research-design dialog." Eugene, Oregon, April 2011.
- [O.7] Indiana University – Purdue University Indianapolis: "Maximizing communication among research and design in industry". Indianapolis, Indiana, April 2010.
- [O.6] DePaul University: "Bridging the gap between user experience research and design: An analysis of personas". Chicago, Illinois, April 2010.
- [O.5] Google: "Communication among design and research". Palo Alto, California, March 2010.
- [O.4] Puget Sound SIGCGI: "An analysis of personas". Seattle, Washington, March, 2010.
- [O.3] University of Washington: "Using the data you have for persona creation". Presented as part of a workshop designed for a graduate class. Seattle, Washington, January 2010.
- [O.2] University of Washington: "Design for Inclusion: Using Familiar Methods for Unfamiliar Contexts." Presented with Emma Rose and Beth Kolko as part of the seminar series: "Current Issues in Human Centered Design & Engineering. Seattle, Washington, January 2010.
- [O.1] Microsoft Corporation: "How to maximize personas as a communication summarization for designers". Redmond, Washington, December 2009.

Teaching (Only includes teaching activities at DePaul University)

2017 Spring	HCI 590	Child Computer Interaction
2017 Winter Spring 2016 Winter Spring Autumn 2015 Autumn 2013 Winter Spring 2012 Winter Autumn 2011 Winter Spring Autumn	HCI 445	Inquiry methods and use analysis
2016 Autumn 2015 Autumn 2014 Autumn 2013 Spring 2012 Spring 2010 Autumn	HCI 511	Design for accessibility and diverse users
2016 Winter 2015 Winter 2013 Autumn	HCI 512	Information visualization and infographics
2015 Spring 2014 Winter 2013 Winter	GAM 312	Game user research and playtesting
2015 Winter Spring 2014 Winter Autumn	HCI 470	Digital page design
2013 Autumn 2012 Autumn	HCI 514	Global user research
2012 Winter 2011 Winter Spring	HCI 454	Interaction design and information architecture
2011 Autumn	GAM 226	Game design for majors
2011 Spring	HCI 594	HCI Capstone

Curricular Development

New courses

HCI 590	Child Computer Interaction (Spring 2017)
HCI 512	Information visualization and Infographics (Autumn 2013)
GAM 312	Game user research and playtesting (Winter 2013)
HCI 514	Global user research (Autumn 2012)

Re-design of existing courses

HCI 470	Digital page design Redesigned for Autumn 2013
HCI 445	Inquiry methods and use analysis Redesigned for Autumn 2012
HCI 454	Interaction design and information architecture Redesigned for Winter 2011
HCI 511	Design for accessibility and diverse users Redesigned Autumn 2010

Guest lectures

2014 & 2015 Autumn	GAM 312 (Game user research and playtesting)
2013 Autumn	HCI 445 (Inquiry Methods and Use Analysis)
2013 Winter	GAM 226 (Game Design for Majors)
2012 Autumn	HCI 454 (Interaction design and information architecture)
2011 Spring	CSC 426 (Values and Computer Technology)
2011 Winter	GAM 395 (Capstone)
2010 Autumn	HCI 594 (Capstone)
2010 Autumn	HCI 445 (Inquiry Methods and Use Analysis)

Research advising and independent studies

PhD students	Jinghui Cheng, Kathryn Wozniak, Ali A. Alkhafaji
Masters students	Dorian Anderson, Lisa Mace Allen, Elaina Boytor, Daina Buchner, Phobey Cass, Morgan Caputo, Erica Christian, Maria Dahman, Jessica DeJong, Carl Duffield, Tim Grabacki, Christina Hanschke, Savina Imrhan, Aartati Israni, Leillani Johnson, Steven Johnson, Travis Lowdermilk, Nathan Petts, Aaron Reiner, Emily Ryou, Ravali Singamaneni, Jonathan Shalvi, Dan Spinner, Irena Svidovsky, Jenny Todd, Cesar Torres, Ryan Two, Silpa Vipparti, Abhinit Parelkar, Wenyi Wang, Mary Jo Zefeldt,
Undergraduate students	Lukas Nicola, Michelle Ludwig

Grants

Funded Research Grants

Title	Human-computer Interaction in Practice: Support for Pedagogy
My Role	Principal Investigator (PI)
Grantor	Academic Initiatives Pool DePaul University
Grant Amount	\$10,000.00
Grant Status	Funded Summer 2017

Title	GAANN: Graduate Assistance in Areas of National Need Scholarship Program
My Role	Co-Author (Lead author: Dr. Steve Lytinen, CDM)
Grantor	U.S. Department of Education
Grant Amount	\$563,508.00
Grant Status	Funded Autumn 2016

Title	Supporting Decision-making and Information-sharing about Educational Technologies for Children with Autism: Preliminary Interview/Survey Studies
My Role	Principal Investigator (PI)
Grantor	University Research Council DePaul University
Grant Amount	\$3,456.00
Grant Status	Funded Spring 2016

Title	Support for Teaching Accessible Computing through Biographical Short Films: A Pilot Project
My Role	Principal Investigator (PI)
Grantor	Vincentian Endowment Fund DePaul University
Grant Amount	\$8,000.00
Grant Status	Funded Winter 2016

Title	Cognitive Rehabilitation Potential of a Commercial Driving Simulation Videogames: Pilot Study for Brain Injury Rehabilitation
My Role	Principal Investigator (PI)
Grantor	University Research Council DePaul University
Grant Amount	\$3,500.00
Grant Status	Funded Autumn 2015

Title	Therapeutic Games for Brain Injury Rehabilitation: Exploring Tools for Designers
My Role	Principal Investigator (PI)
Grantor	University Research Council DePaul University
Grant Amount	\$3,490.00
Grant Status	Funded Spring 2015

Title	Quantitative Assessment of Using Motion-Based Videogame to Improve Rehabilitation Outcomes in Patients with Brain Injuries
My Role	Principal Investigator (PI)
Grantor	DePaul and Rosalind Franklin Universities
Grant Amount	\$80,994
Grant Status	Funded Autumn 2014

Title	Supporting Therapists for Rehabilitation of Brain Injuries using Motion-based gaming
My Role	Principal Investigator (PI)
Grantor	University Research Council DePaul University
Grant Amount	\$3375.00
Grant Status	Funded Winter 2014

Title	Supporting Therapists In Motion-Based Gaming For Brain Injury Rehabilitation
My Role	Principal Investigator (PI)
Grantor	DePaul and Rosalind Franklin Universities
Grant Amount	\$73,370.00
Grant Status	Funded Autumn 2013

Title	Mixed methods study of factors that promote active video game use in children
My Role	Co-Principal Investigator (PI: Dr. Kristen Schneider: Rosalind Franklin University)
Grantor	DePaul and Rosalind Franklin Universities
Grant Amount	\$38,556.00
Grant Status	Funded Autumn 2013

Title	Supporting therapists who use motion-based video games: Building a system to help therapists choose commercially available games
My Role	Principal Investigator (PI)
Grantor	University Research Council DePaul University
Grant Amount	\$3500.00
Grant Status	Funded Autumn 2012

Title	GAANN: Graduate Assistance in Areas of National Need Scholarship Program
My Role	Co-Author (Lead author: Dr. Steve Lytinen, CDM)
Grantor	U.S. Department of Education
Grant Amount	\$650,000.00
Grant Status	Funded Autumn 2012

Title	Supporting therapists in motion-based gaming: A recommender and rating system for commercially available games
My Role	Principal Investigator (PI)
Grantor	University Research Council DePaul University
Grant Amount	\$3490.00
Grant Status	Funded Autumn 2011

Title	UCDE Labs: Support for user-centered approaches to design and evaluation of games, software and other technologies
My Role	Principal Investigator (PI)
Grantor	Academic Technology Grant DePaul University
Grant Amount	\$7500.00
Grant Status	Funded Autumn 2011

Title	Exploring user-experience professions in human-computer interaction
My Role	Principal Investigator (PI)
Grantor	University Research Council DePaul University
Grant Amount	\$3200.00
Grant Status	Funded Spring 2011

Research Grants NOT funded

Title	CHS: Small: Recommending Interactive Technologies Aimed for Children with Autism – Support for Researchers, Educators and Parents
My Role	Principal Investigator (PI)
Grantor	National Science Foundation
Grant Amount	\$499,855.00
Grant Status	Not funded (Submitted January 2017)

Title	CAREER: Data-Driven Approaches to Support Gameful Brain Injury Rehabilitation
My Role	Principal Investigator (PI)
Grantor	National Science Foundation
Grant Amount	\$690,908.00
Grant Status	Not funded (Submitted July 2015)

Title	CAREER: Gameful Approaches to Brain Injury Rehabilitation
My Role	Principal Investigator (PI)
Grantor	National Science Foundation
Grant Amount	\$630,940.00
Grant Status	Not funded (submitted July 2014)

Title	CAREER: Supporting Therapists for Rehabilitation of Brain Injuries using Motion-based gaming
My Role	Principal Investigator (PI)
Grantor	National Science Foundation
Grant Amount	\$544,847.00
Grant Status	Not funded (submitted July 2013)

Work (Industry) Experience

2010

User Experience Researcher

Microsoft/Xbox games group (contract): 2010
Redmond, WA

2008 - 2009

Research Consultant

PATH - Safe Water Project / Gates Foundation grant
Seattle, WA

Supporting Research and Pedagogy

- 2014 - present Participant Pool
Created and manage an IRB approved subject pool for CDM and the College of Communication to help with recruitment of participants for user research for both students and faculty
- 2012 - present User Research Lab
Creation and management of a user research lab shared by students and faculty.

Other Events at DePaul

- 2010 - present New Graduate Receptions (Autumn, Winter and Spring)
- 2012 - present Accelerated Admissions (Autumn, Winter and Spring)
- 2011 - 2014 Spotlight events for prospective students and families
- 2012 - 2013 Faculty mentor program for incoming freshmen

Volunteer work in the Community

- 2010 - 2017 Anixter Center, New Focus
I volunteer working with people who have had a brain injury.
- 2011 - 2014 Overnight Nerderdy Challenge
Volunteered as a judge at an event where designers and developers create websites for local non-profit organizations. I also helped with managing the event held at CDM in April 2014
- 2006 - 2007 University of Washington's Experimental Education Unit (EEU)
Worked with children who have autism.

Professional Activities

Memberships

- The Usability Professionals' Association (UPA)
- Association for Computing Machinery (ACM)
- Interaction Design Association (IXDA)
- Institute of Electrical and Electronics Engineers (IEEE)

Review and Referee Work

- ACM Conference on Computers and Accessibility Program Committee (2016, 2017)
- ACM Conference on Human Factors in Computing (2011 - 2017)
- Games for Health Journal (2014 - 2017)
- Cognitive Science Society Conference (2011 - 2017)
- Games Universal Access in the Information Society Journal (2015)
- Conference for Persuasive Health (2014)
- Alt. Chi (2013)
- TVN Catalyst Grant Program (2013)
- National Science Foundation (Proposal review panels May 2011 and April 2016)