## Derek Harter - Publications

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## **Bibliography**

- [1] Shulan Lu and Derek Harter. Applying predictive processing and functional redeployment to understanding embodied virtual experiences. SOJ Psychology, 3:1–9, 2016. URL https://symbiosisonlinepublishing.com/psychology/psychology30.pdf.
- [2] Shulan Lu and Derek Harter. Toward a cognitive processing theory of player's experience of computer mediated environments. In *Proceedings of the 2016 Annual Symposium on Computer-Human Interaction in Play Companion Extended Abstracts*, CHI PLAY Companion '16, pages 198–203, New York, NY, USA, 2016. ACM. doi:10.1145/2968120.2987742.
- [3] Derek Harter. Ramping up big data analytics training pipeline. In NSF Big Data Innovative Hub Meeting, NSF Big Data Initiative, pages 10–11, 2015. URL http://southbdhub.gatech.edu/.
- [4] Derek Harter. Spike synchronization in a small-world network. In 2015 International Joint Conference on Neural Networks (IJCNN), pages 1–8, July 2015. doi:10.1109/IJCNN.2015.7280421.
- [5] Shulan Lu and Derek Harter. Essentialism in food preference. Annals of Psychotherapy & Integrative Health, pages 17–22, 2015.
- [6] Shulan Lu, Derek Harter, Paweena Kosito, and Pratyush Kotturu. Developing low-cost training environments: How do effector and visual realism influence the perceptual grounding of actions? *Journal of Cognitive Education and Psychology*, 13(1):3–18, 2014. doi:10.1891/1945-8959.13.1.3.
- [7] Derek Harter. Hierarchically arranged mutualism of neural circuit ecosystems. In Derong Liu, Cesare Alippi, Dongbin Zhao, and Amir Hussain, editors, Advances in Brain Inspired Cognitive Systems. BICS 2013, volume 7888 of Lecture Notes in Computer Science, pages 255–260, Berlin, Heidelberg, 2013. Springer. doi:10.1007/978-3-642-38786-9\_29.
- [8] Derek Harter. Nested mutualism of brain information processing networks. In 2013 International Joint Conference on Neural Networks (IJCNN), pages 22–28, August 2013.
- [9] Derek Harter. Evolution of small-world properties in embodied networks. In Huaguang Zhang, Amir Hussain, Derong Liu, and Zhanshan Wang, editors, Advances in Brain Inspired Cognitive Systems. BICS 2012, volume 7366 of Lecture Notes in Computer Science, pages 102–111. Springer, Berlin, Heidelberg, 2012. doi:10.1007/978-3-642-31561-9\_11.
- [10] Derek Harter, Shulan Lu, Paweena Sintupan, and Pratyush Kotturu. How controller embodiment affects task performance in computer simulated training. In D. G. Shin, editor, *International*

- Conference on Human Computer Interaction, pages 22–28, May 2012. doi:10.2316/P.2012.772-026.
- [11] Derek Harter. Functional and physical constraints for evolving small-world structure in embodied networks. In *The 2011 International Joint Conference on Neural Networks*, pages 2357–2362, July 2011. doi:10.1109/IJCNN.2011.6033523.
- [12] Derek Harter, Shulan Lu, Pratyush Kotturu, and Devin Pierce. An immersive virtual environment for varying risk and immersion for effective training. In ASME 2011 World Conference on Innovative Virtual Reality, pages 301–307, June 2011. doi:10.1115/WINVR2011-5522.
- [13] Shulan Lu, Derek Harter, and Devin Pierce. Potentials and challenges of using virtual environments in psychotherapy. *Annals of Psychotherapy & Integrative Health*, 14(1):56–66, 2011. ISSN 1535-4075. URL http://www.biomedsearch.com/article/Potentials-challenges-using-virtual-environments/258131232.html.
- [14] Shulan Lu, Devin Pierce, Terry Rawlinson, and Derek Harter. The role of high visual realism in reducing potential risk taking in simulated environments. In *ASME 2011 World Conference on Innovative Virtual Reality*, pages 325–329, June 2011. doi:10.1115/WINVR2011-5542.
- [15] Devin Pierce, Shulan Lu, and Derek Harter. Risk taking differences affect outcomes in virtual training scenarios. In ASME 2011 World Conference on Innovative Virtual Reality, June 2011.
- [16] Derek Harter and L Zhang. Parallelization of genetic optimization for large network simulations on a cluster computer. In *Proceedings of the Society for Design and Process Science. SDPS 2010*, pages 128–136, July 2010. URL https://www.sdpsnet.org/sdps/index.php/conferences.
- [17] Devin Pierce, Shulan Lu, and Derek Harter. Perceiving events in simulated environments: The role of expectation driven processes. In ASME 2010 World Conference on Innovative Virtual Reality, pages 333–339, May 2010. doi:10.1115/WINVR2010-3754.
- [18] Shulan Lu, Derek Harter, and Arthur C. Graesser. An empirical and computational investigation of perceiving and remembering event temporal relations. *Cognitive Science*, 33(3):345–373, 2009. ISSN 1551-6709. doi:10.1111/j.1551-6709.2009.01016.x.
- [19] Devin Pierce, Shulan Lu, and Derek Harter. Enacting actions in simulated environments. In ASME-AFM 2009 World Conference on Innovative Virtual Reality, pages 117–122, February 2009. doi:10.1115/WINVR2009-726.
- [20] Derek Harter, Robert Kozma, and Srinivas Achunala. Dynamical aspects of behavior generation under constraints. *Cognitive neurodynamics*, 1(3):213–223, 2007. doi:10.1007/s11571-007-9016-y.
- [21] Derek Harter. Time constraints and the evolution of scale-free properties in associative networks. In Proceedings of the NSF International Workshop on Large Scale Random Graph Methods for Modeling Mesoscopic Behavior in Biological and Physical Systems, pages 83–88, August 2007.
- [22] Derek Harter and Robert Kozma. Aperiodic dynamics and the self-organization of cognitive maps in autonomous agents. *International Journal of Intelligent Systems*, 21(9):955–971, 2006. doi:10.1002/int.20171.
- [23] Derek Harter and Robert Kozma. Nonconvergent dynamics and cognitive systems. In *Proceedings* of the Annual Meeting of the Cognitive Science Society, volume 28, pages 1446–1451, July 2006. URL https://escholarship.org/uc/item/1222d7z2.

- [24] Derek Harter. Complex systems approaches to emergent goal formation in cognitive agents. In *The 2006 IEEE International Joint Conference on Neural Network Proceedings*, pages 4966–4971, July 2006. doi:10.1109/IJCNN.2006.247199.
- [25] Shulan Lu and Derek Harter. The role of overlap and end state in perceiving and remembering events. In *Proceedings of the Annual Meeting of the Cognitive Science Society*, volume 28, pages 1729–1835, July 2006.
- [26] Derek Harter and Robert Kozma. Chaotic neurodynamics for autonomous agents. *IEEE Transactions on Neural Networks*, 16(3):565–579, 2005. doi:10.1109/TNN.2005.845086.
- [27] Derek Harter and Shulan Lu. A synthesis of many levels of constraints as a modern view of development. Behavioral and Brain Sciences, 28(4):498–499, 2005. doi:10.1017/S0140525X05320085.
- [28] Arthur C Graesser, Kurt VanLehn, Carolyn P Rosé, Pamela W Jordan, and Derek Harter. Intelligent tutoring systems with conversational dialogue. AI magazine, 22(4):39, 2001. doi:10.1609/aimag.v22i4.1591.
- [29] Arthur C Graesser, Natalie Person, Derek Harter, Tutoring Research Group, et al. Teaching tactics and dialog in AutoTutor. *International Journal of Artificial Intelligence in Education*, 12(3):257–279, 2001. URL https://www.researchgate.net/publication/240273586\_Teaching\_Tactics\_and\_Dialog\_in\_AutoTutor.
- [30] Derek Harter, Arthur C Graesser, and Stan Franklin. Bridging the gap: Dynamics as a unified view of cognition. Behavioral and Brain Sciences, 24(1):45–46, 2001. doi:10.1017/S0140525X01303916.
- [31] Derek Harter and Robert Kozma. Task environments for the dynamic development of behavior. In V.N. Alexandrov, J.J. Dongarra, B.A. Juliano, R.S. Renner, and C.J.K. Tan, editors, Computational Science ICCS 2001, volume 2074 of Lecture Notes in Computer Science, pages 300–309. Springer, Berlin, Heidelberg, 2001. doi:10.1007/3-540-45718-6 34.
- [32] Arthur C Graesser, Peter Wiemer-Hastings, Katja Wiemer-Hastings, Derek Harter, Tutoring Research Group, and Natalie Person. Using latent semantic analysis to evaluate the contributions of students in AutoTutor. *Interactive learning environments*, 8(2):129–147, 2000. doi:10.1076/1049-4820(200008)8:2;1-B;FT129.
- [33] Peter Wiemer-Hastings, Arthur C Graesser, Derek Harter, Tutoring Research Group, et al. The foundations and architecture of AutoTutor. In B.P. Goettl, H.M. Halff, C.L. Redfield, and V.J. Shute, editors, *Intelligent Tutoring Systems*. *ITS 1998*, volume 1452 of *Lecture Notes in Computer Science*, pages 334–343, Berlin, Heidelberg, 1998. Springer. doi:10.1007/3-540-68716-5\_39.