

Brent Harrison
Department of
Computer Science
University of Kentucky

Professional Preparation

Auburn University	Auburn, AL	Computer Science	B.S.	2008
North Carolina State University	Raleigh, NC	Computer Science	M.S.	2012
North Carolina State University	Raleigh, NC	Computer Science	Ph.D.	2014

Appointments

Assistant Professor, Department of Computer Science, University of Kentucky, 2017–now. Research Scientist, School of Interactive Computing, Georgia Institute of Technology, 2014–2017.

Recent Products

- Japheth Gado, Brent Harrison, Mats Sandgren, Jerry Ståhlberg, Gregg T. Beckham, and Christina M. Payne. Machine learning reveals sequence-function relationships in family 7 glycoside hydrolases. *Journal of Biological Chemistry* (2020). **Under Review**
- Nathaniel Hudson, Hana Khamfroush, Brent Harrison, and Adam Craig. "Smart Advertisement for Maximal Clicks in Online Social Networks Without User Data." In *2020 IEEE International Conference on Smart Computing (SMARTCOMP)*, pp. 172-179. IEEE, 2020.
- Justus Robertson, Brent Harrison, and Arnav Jhala. Interactive Summarization for Data Filtering and Triage. In *The Thirty-Third International Flairs Conference*. 2020.
- Dave Mobley, Judy Goldsmith, and Brent Harrison. Discovering Hierarchies for Reinforcement Learning Using Data Mining. In *The Thirty-Third International Flairs Conference*. 2020.
- Kshitija Taywade, Judy Goldsmith, and Brent Harrison. Decentralized Marriage Models. In *The Thirty-Third International Flairs Conference*. 2020.
- Md Sultan Al Nahian, Spencer Frazier, Mark Riedl, and Brent Harrison. Learning norms from stories: A prior for value aligned agents. In *Proceedings of the AAAI/ACM Conference on AI, Ethics, and Society*, pp. 124-130. 2020.
- Md Sultan Al Nahian, Tasmia Tasrin, Sagar Gandhi, Ryan Gaines, and Brent Harrison. (2019). A Hierarchical Approach for Visual Storytelling Using Image Description. In *Proceedings of the 2019 International Conference on Interactive Digital Storytelling (ICIDS)*.
- Pradyumna Tambwekar, Murtaza Dhuliawala, Lara J. Martin, Animesh Mehta, Brent Harrison, Mark O. Riedl. (2019). Controllable Neural Story Plot Generation via Reinforcement Learning. In *Proceedings of the 2019 International Joint Conference on Artificial Intelligence (IJCAI)*.
- Upol Ehsan, Pradyumna Tambwekar, Larry Chan, Brent Harrison, and Mark O.

- Riedl. (2019). Automated Rationale Generation: A Technique for Explainable AI and its Effects on Human Perceptions. In *Proceedings of the ACM Conference on Intelligent User Interfaces*.
- Sagar Gandhi and Brent Harrison. (2019) Guided Open Story Generation Using Probabilistic Graphical Models. In *Proceedings of the 2019 Games and NLP Workshop (GAMNLP-19)*.
 - Chengxi Li, Sagar Gandhi, and Brent Harrison. (2019). End-to-End Let's Play Commentary Generation using Multi-Modal Video Representations. In *Proceedings of the 2019 Games and NLP Workshop (GAMNLP-19)*.
 - Upol Ehsan, Pradyumna Tambwekar, Larry Chan, and Mark O. Riedl. (2018). Automated Rationale Generation: A Technique for Explainable AI and its Effects on Human Perceptions. In *Proceedings of the ACM Conference on Intelligent User Interfaces*.
 - Kshitija Taywade, Judy Goldsmith, and Brent Harrison. (2018). Decentralized Multiagent Approach for Hedonic Games. In *Proceedings of the 2018 European Conference on Multiagent Systems (EUMAS)*.
 - Brent Harrison, Upol Ehsan, and Mark O. Riedl. (2018). Guiding Reinforcement Learning Exploration Using Natural Language. In *Proceedings of the 2018 International Conference on Autonomous Agents and Multiagent Systems*.

Activities in 2020

- Is PI on a LAS proposal titled *Hierarchical Abstract Interventions for Analyst Workflow* that was recommended for funding this year.
- Is co-PI on a funded NSF proposal titled *Learning from Stories: Practical Value Alignment and Taskability for Autonomous Systems*.
- Is PI on a funded LAS proposal titled *Interventions for Analyst Workflow*.
- Had three students pass their qualifying exams.
- Published several papers with my graduate students and other collaborators both within and outside of the university.
- Organized the 2020 Workshop on Intelligent Narrative Technologies
- Professional service, including referee for IEEE Transactions on Games and program committee member for the International Joint Conference on Artificial Intelligence, the Foundation of Digital Games Conference, the AAAI conference on AI and Digital Interactive Entertainment, the workshop on Adaptive Learning Agents, the SAFEAI Workshop, and I served as a subreviewer for the conference on AI, Ethics, and Society.
- Further developed graduate class on Sequential Decision Making.