

## Clayton T. Morrison

Associate Professor, School of Information, University of Arizona



Dr. Clay Morrison is an Associate Professor in the School of Information at the University of Arizona. He has 20+ years of experience in machine learning and artificial intelligence, during which he has published over 70 peer-reviewed articles. Dr. Morrison leads the Machine Learning for Artificial Intelligence Lab at University of Arizona. His projects have focused on developing computer systems that can be taught through natural instruction, developing machine learning algorithms for learning structured, latent representations from data, and modeling the relationship between human facial expressions, emotion, and decision-making. Dr. Morrison's current work includes developing methods for machine reading from scientific documents, assembling probabilistic dynamics models from textual descriptions of causal mechanisms, and assembling executable scientific models from text, equations, and source code.

### EDUCATION

- MS in Computer Science, University of Massachusetts, Amherst, MA
- PhD in Philosophy, Binghamton University, Binghamton, NY
- MA in Philosophy, Binghamton University, Binghamton, NY
- BS in Cognitive Science, Occidental College, Los Angeles, CA

### PROFESSIONAL EXPERIENCE

- 2019 – present: Associate Professor, School of Information, University of Arizona; Regular Faculty Member of the Statistics Graduate Interdisciplinary Program, Cognitive Science Graduate Interdisciplinary Program; Affiliated Faculty of the Computer Science Department
- 2014 – 2019: Associate Professor (non-tenured, tenure track), School of Information, U. of Arizona
- 2011 – 2014: Associate Director for the School of Information: Science, Technology, and Arts, U. of Arizona
- 2008 – 2011: Assistant Research Professor, School of Information: Science, Technology and Arts, U. of Arizona
- 2006 – 2008: Research Computer Scientist, University of Southern California
- 2003 – 2006: Postdoctoral Fellow, University of Southern California
- 1999 – 2003: Research Fellow, University of Massachusetts, Amherst

### SELECTED PUBLICATIONS

- Maria Alexeeva, Rebecca Sharp, Marco A. Valenzuela-Escárega, Jennifer Kadowaki, Adarsh Pyarelal, and Clayton T. Morrison. MathAlign: Linking Formula Identifiers to their Contextual Natural Language Descriptions. In *Proceedings of the 12th Edition of the Language Resources and Evaluation Conference (LREC)*, 2020. <https://www.aclweb.org/anthology/2020.lrec-1.269/>
- Adarsh Pyarelal, Marco A. Valenzuela-Escárega, Rebecca Sharp, Paul D. Hein, Jon Stephens, Pratik Bhandari, HeuiChan Lim, Saumya Debray and Clayton T. Morrison. AutoMATES: Automated Model Assembly from Text, Equations, and Software. *Modeling the World's Systems*, 2019. <https://arxiv.org/abs/2001.07295>
- Rebecca Sharp, Adarsh Pyarelal, Benjamin M. Gyori, Keith Alcock, Egoitz Laparra, Marco A. Valenzuela-Escárega, Ajay Nagesh, Vikas Yadav, John A. Bachman, Zheng Tang, Heather Lent, Fan Luo, Mithun Paul, Steven Bethard, Kobus Barnard, Clayton Morrison, Mihai Surdeanu. Eidos & Delphi: From Free Text to Executable Causal Models. *Systems Demonstration Track at the Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL)*, 2019.
- Marco A. Valenzuela-Escárega, Özgün Babur, Gus Hahn-Powell, Dane Bell, Thomas Hicks, Enrique Noriega-Atala, Xia Wang, Mihai Surdeanu, Emek Demir, Clayton T. Morrison. Large-scale Automated Machine Reading Discovers New Cancer Driving Mechanisms, Database: *The Journal of Biological Databases and Curation*, 2018. <https://doi.org/10.1093/database/bay098>
- Colin R. Dawson, Chaofan Huang, and Clayton T. Morrison. An Infinite Hidden Markov Model with Similarity-biased Transitions. In *Proceedings of the Thirty-Fourth International Conference on Machine Learning (ICML)*, 2017. <https://arxiv.org/abs/1707.06756>