Publication List
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Journal Articles

- **Alexander G. Ororbia II**, Tomas Mikolov, and David Reitter. (2017). "Learning Simpler Language Models with the Differential State Framework". In: *Neural Computation*. (In Press).

- **Alexander G. Ororbia II**, C. Lee Giles, and Daniel Kifer. (2017). "Unifying Adversarial Training Algorithms with Data Gradient Regularization". In: *Neural Computation* (Volume 29, Issue 4, pp. 867-887).

Conference Papers

- Iulian Serban*, **Alexander G. Ororbia II***, Joelle Pineau, and Aaron Courville. (2017)."Piecewise Latent Variables for Neural Variational Text Processing". In: *Proceedings of Empirical Methods in Natural Language Processing*, Copenhagen, Denmark (pp. 422-432). (* First two authors contributed equally.)

- Dafang He, Xiao Yang, Chen Liang, Zihan Zhou, **Alexander G. Ororbia II**, Daniel Kifer, C Lee Giles. (2017). "Multi-scale FCN with Cascaded Instance Aware Segmentation for Arbitrary Oriented Word Spotting In The Wild". In: *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition*, Honolulu, Hawaii (pp. 3519-3528).

- Qinglong Wang, Wenbo Guo, Kaixuan Zhang, **Alexander G. Ororbia II**, Xinyu Xing, Xue Liu, and C. Lee Giles. (2017). "Adversary Resistant Deep Neural Networks with an Application to Malware Detection". In: *Proceedings of the 23rd ACM SIGKDD International Conference on Knowledge Discovery and Data Mining*, Halifax, Nova Scotia, Canada (pp. 1145-1153).

- Xiao Yang, Dafang He, Wenyi Huang, **Alexander G. Ororbia II**, Zihan Zhou, Daniel Kifer, C Lee Giles. (2017). "Smart Library: Identifying Books on Library Shelves Using Supervised Deep Learning for Scene Text Reading". In: *Proceedings of ACM/IEEE Joint Conference on Digital Libraries (JCDL)*, Toronto, Ontario, Canada (pp. 245-248).

- Bill McDowell, Nathanel Chambers, **Alexander G. Ororbia II**, and David Reitter. (2017). "Event Ordering with a Generalized Model for Sieve Prediction Ranking". In: *Proceedings of the 8th International Joint Conference on Natural Language Processing (IJCNLP)*, Taipei, Taiwan.

- Shuting Wang, **Alexander G Ororbia II**, Zhaohui Wu, Kyle Williams, Chen Liang, Bart Pursel, and C Lee Giles. "Using Prerequisites to Extract Concept Maps fromTextbooks". (2016). In: *Proceedings of the 25th ACM International on Conference on Information and Knowledge Management*, Indianapolis, Indiana, USA (pp. 317-326).

- **Alexander G Ororbia II**, C Lee Giles, and David Reitter. (2015). "Learning a Deep Hybrid Model for Semi-Supervised Text Classification". In: *Proceedings of Empirical Methods in Natural Language Processing*, Lisbon, Portugal (pp. 471âĂŞ481).

- **Alexander G. Ororbia II**, David Reitter, Jian Wu, and C Lee Giles. (2015). "Online learning of deep hybrid architectures for semi-supervised categorization". In: *Proceedings of Joint European Conference on Machine Learning and Knowledge Discovery in Databases*, Porto, Portugal (pp. 516-532).

- **Alexander G Ororbia II**, Yang Xu, Vito DâĂŹOrazio, David Reitter. (2015) "Error-Correction and Aggregation in Crowd-Sourcing of Geopolitical Incident Information". In: *Proceedings of Social Computing, Behavioral-Cultural Modeling, and Prediction: 8th International Conference*, Washington, DC, United States (pp. 381-387).

- Jian Wu, Kyle Williams, Hung-Hsuan Chen, Madian Khabsa, Cornelia Caragea, **Alexander G Ororbia II**, Douglas Jordan, and C Lee Giles. (2014). "CiteSeerX: AI in a Digital Library Search Engine". *Annual Conference on Innovative Applications of Artificial Intelligence (IAAI)*, Quebec City, Quebec, Canada. (Best Application Paper).

- Zhaohui Wu, Jian Wu, Madian Khabsa, Kyle Williams, Hung-Hsuan Chen, Wenyi Huang, Suppawong Tuarob, Sagnik Ray Choudhury, **Alexander G Ororbia II**, Prasenjit Mitra, and C Lee Giles. (2014). "Towards building a scholarly big data platform: Challenges, lessons and opportunities". In: *Proceedings of the 14th ACM/IEEE-CS Joint Conference on Digital Libraries (JCDL)*, London, United Kingdom.

Talks & Tutorials

- **Alexander G. Ororbia II**, David Reitter, and C. Lee Giles. "The Temporal Neural Coding Network: Towards Lifelong Language Learning". 11th Annual Machine Learning Symposium. *https://www.nyas.org/events/2017/11th-annual-machine-learning-symposium/*. (Peer-reviewed and accepted poster and spotlight talk).

- **Alexander G. Ororbia II**. (2016)."Deep Learning Applied". *2016 International Conference on Social Computing, Behavioral-Cultural Modeling & Prediction and Behavior Representation in Modeling and Simulation (SBP-BRIMS)*, Washington DC, USA. (Accepted tutorial).

Workshop Papers

- **Alexander G Ororbia II**, Jian Wu, Madian Khabsa, Kyle Williams, and C. Lee Giles. (2015). "Big Scholarly Data in CiteSeerX: Information Extraction from the Web". In: *Proceedings of the 24th International Conference on World Wide Web*, Florence, Italy (pp. 597-602).

- Jian Wu, **Alexander G Ororbia II**, Kyle Williams, Madian Khabsa, Zhaohui Wu, and C Lee Giles. (2014). "Utility-based control feedback in a digital library search engine: Cases in CiteSeerX". *9th International Workshop on Feedback Computing (Feedback Computing 14)* (USENIX), Philadelphia, Pennsylvania, USA.

- **Alexander G Ororbia II**, Jian Wu, and C Lee Giles. (2014). "CiteSeerX: Intelligent Information Extraction and Knowledge Creation from Web-Based Data". *4th Workshop on Automated Knowledge Base Construction (AKBC) (at NIPS 2014)*, Montreal, Canada.

To Appear & In Review

- Shikun Liu, C. Lee Giles, and **Alexander G. Ororbia II***. "Learning a Hierarchical Latent-Variable Model of Voxelized 3D Shapes". *arXiv:1705.05994 [cs.LG]*. (* Senior author.)

- **Alexander G Ororbia II**, Fridolin Linder, and Joshua Snoke. "Using Neural Generative Models to Release Synthetic Twitter Corpora with Reduced Stylometric Identifiability of Users". *arXiv:1606.01151 [cs.LG]*.

- **Alexander G. Ororbia II**, C. Lee Giles, and David Reitter. "Online Semi-Supervised Learning with Deep Hybrid Boltzmann Machines and Denoising Autoencoders". *arXiv:1511.06964 [cs.LG]*.

- Qinglong Wang, Wenbo Guo, Kaixuan Zhang, **Alexander G. Ororbia II**, Xinyu Xing, C. Lee Giles, and Xue Liu. "Learning Adversary-Resistant Deep Neural Networks". *arXiv:1612.01401 [cs.LG]*.

- Qinglong Wang, Kaixuan Zhang, **Alexander G. Ororbia II**, Xinyu Xing, Xue Liu, C. Lee Giles. "An Empirical Evaluation of Rule Extraction from Recurrent Neural Networks". *arXiv:1709.10380 [cs.LG]*.

- Qinglong Wang, Wenbo Guo, **Alexander G. Ororbia II**, Xinyu Xing, Lynn Lin, C. Lee Giles, Xue Liu, Peng Liu, and Gang Xiong. "Using Non-invertible Data Transformations to Build Adversary-Resistant Deep Neural Networks". *arXiv:1610.01934 [cs.LG]*.

- Hung-Hsuan Chen, **Alexander G Ororbia II**, and C Lee Giles. (2015). "ExpertSeer: a Keyphrase Based Expert Recommender for Digital Libraries". *arXiv preprint arXiv:1511.02058*.