

Andrew Drozdov

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Education	UMass-Amherst , <i>Ph.D. in Computer Science</i> Sep '18 - Current Advised by Andrew McCallum. Deep learning methods for information extraction. New York University , <i>M.S. in Computer Science</i> Sep '15 - Dec '16 Cornell University , <i>M.Eng. in Computer Science</i> Sep '13 - Dec '13 Left to join Okta full-time. University of Michigan , <i>B.S.E. in Computer Science</i> Sep '09 - May '13
Experience	Google AI Language , <i>Research Intern</i> Summer '19 Hosted by Nita Goyal. Exploratory work in entity and relation representation. eBay , <i>Research Engineer</i> Aug '17 - Aug '18 Built neural network based recommendation systems. New York University , <i>Research Assistant</i> Jan '17 - Jul '17 Supervised by Samuel Bowman. Worked with reinforcement learning and deep syntactic models for natural language understanding. Datadog , <i>Data Engineer</i> Summer '15 Okta , <i>Software Engineer</i> Jun '13 - Feb '15
Research Papers	Deep Inside-Outside Recursive Autoencoders (Labeled Parsing) A. Drozdov , P. Verga, Y. Chen, M. Iyyer, A. McCallum We show that a modified architecture of DIORA that learns latent codes is state of the art when labeling existing parse tree structures. EMNLP 2019 (Short). Deep Inside-Outside Recursive Autoencoders (Unlabeled Parsing) A. Drozdov , P. Verga, M. Yadav, M. Iyyer, A. McCallum Using dynamic programming and neural networks, we learn structured representation of text that are efficient for reconstructing sentences. Our method achieves various state-of-the-art results in unsupervised grammar induction. NAACL 2019 (Oral). Emergent Language in a Multi-Modal, Multi-Step Referential Game K. Evtimova, A. Drozdov , D. Kiela, K. Cho When training cooperative agents to classify an image in a zero-shot setting, we observe patterns in their messages and conversation length. ICLR 2018 (Poster). Do latent tree models identify meaningful structure in sentences? A. Williams, A. Drozdov , S. Bowman We analyze 4 models for grammar induction with neural networks. Although they perform well on their respective semantic tasks, it remains unclear whether the generated syntax is optimal or linguistically justified. TACL 2018.
Service	ICML ('20), <i>Reviewer</i> NeurIPS ('19), <i>Reviewer</i> Data Science Tea @ UMass-Amherst ('18, '19), <i>Co-Organizer</i>
Teaching	Cornell University , <i>Teaching Assistant</i> Spring '18 Data Science in the Wild (CS-5304) with Giri Iyengar at Cornell Tech.
Advising	Shruti Jalan, Shyla Gangwar (MS, Project in AKBC, Fall '19) Liam Kantor (BS, Linguistics, Honors Thesis, advised by Joe Pater, Spring '19)
Awards	Best Deep Learning Project (Jointly with K. Evtimova) Fall '16 NYU's Center of Data Science Award Ceremony. Award selected by Yann Lecun. Project Title: Understanding Mutual Information and its Use in InfoGAN