

# Patrick Xia

PERSONAL INFORMATION	<p>paxia@cs.jhu.edu (973) 960-5954 github.com/pitrack   cs.jhu.edu/~paxia</p>	<p>Hackerman 226 3400 N Charles Street Baltimore, MD 21218</p>
EDUCATION	<p>Johns Hopkins University ..... present Center of Language and Speech Processing <i>Advised by: Benjamin Van Durme</i> PhD, Computer Science M.S.E., Computer Science ..... 2018 Carnegie Mellon University ..... 2016 B.S. Computer Science, B.S. Mathematics, Minor in Language Technologies</p>	
SELECTED PUBLICATIONS	<p><u>P. Xia</u>, S. Wu, B. Van Durme. Which *BERT? A Survey Organizing Contextualized Encoders. EMNLP 2020.</p> <p><u>P. Xia</u>, J. Sedoc, B. Van Durme. Incremental Neural Coreference Resolution In Constant. Memory EMNLP 2020.</p> <p>S. Ebner*, <u>P. Xia</u>*, R. Culkin, K. Rawlins, B. Van Durme Multi-Sentence Argument Linking. ACL 2020</p> <p>N. Kim, R. Patel, A. Poliak, <u>P. Xia</u>, A. Wang, R T. McCoy, I. Tenney, A. Ross, T. Linzen, B. Van Durme, S. Bowman and E. Pavlick. Probing What Different NLP Tasks Teach Machines about Function Word Comprehension. *SEM 2019 <i>Best Paper Award</i></p> <p>I. Tenney, <u>P. Xia</u>, B. Chen, A. Wang, A. Poliak, R T. McCoy, N. Kim, B. Van Durme, S. Bowman, D. Das, E. Pavlick. What do you learn from context? Probing for sentence structure in contextualized word representations. ICLR 2019</p> <p><u>P. Xia</u> and D. Yarowsky. Deriving Consensus for Multi-Parallel Corpora: an English Bible Study. IJCNLP 2017</p>	
ONGOING PROJECTS	<p>Efficient Information Extraction → scaling up models for long documents</p> <p>Coreference Resolution → surveying and benchmarking datasets</p>	
WORK	<p>Research Intern, Google</p> <ul style="list-style-type: none"><li>Grounding noun phrases to knowledge bases using weak supervision</li></ul> <p>Software Engineering Intern, Facebook</p> <ul style="list-style-type: none"><li>Improved parser and semantic analyzer for an internal query language</li><li>Created monitoring service for backend data pipelines</li></ul> <p>Software Development Engineer Intern, Microsoft</p> <ul style="list-style-type: none"><li>Designed and implemented new UX features in Microsoft Office</li></ul>	<p>Summer 2019</p> <p>Summer 2015</p> <p>Summer 2014</p>
UNPUBLISHED	<p>Translating into Morphologically Rich Languages with Word-level LSTMs (2016) Senior Honors Thesis (advised by C. Dyer)</p> <ul style="list-style-type: none"><li>Predicting inflection based on word and character level models of context</li></ul> <p>Annotating Character Relationships in Literary Texts (2015) <i>P. Massey, P. Xia, D. Bamman, NA Smith</i></p> <ul style="list-style-type: none"><li>Classified literary relationships in fiction; process described in arXiv paper</li></ul>	
TEACHING	<p>Teaching Assistant</p> <ul style="list-style-type: none"><li>Declarative Methods</li><li>Great Theoretical Ideas of Computer Science (15-251)</li><li>Parallel and Sequential Data Structures and Algorithms (15-210)</li><li>Principles of Imperative Programming (15-122)</li></ul>	<p>JHU; Spring 2017</p> <p>CMU; Spring 2015 - Spring 2016</p> <p>CMU; Fall 2014</p> <p>CMU; Fall 2013</p>
OTHER	<p>Python (TensorFlow and PyTorch), C++/C, AllenNLP, Transformers</p> <p>U.S. Permanent Resident</p> <ul style="list-style-type: none"><li>Familiar with Mandarin Chinese and French</li><li>Ireland → Australia (citizen) → Hong Kong → US</li></ul> <p>Puzzlehunt writing &amp; organizing: PuzzlehuntCMU (2012-2017) and Galactic Puzzlehunt (2017 - present)</p>	