

Pamela J. Shapiro

CONTACT INFORMATION	Department of Computer Science Johns Hopkins University Hackerman 226 3400 North Charles Street Baltimore, MD 21218, USA	Phone: (617) 407-7209 pshapiro@jhu.edu pamelashapiro.github.io
RESEARCH INTERESTS	Neural machine translation (in particular issues pertaining to morphological complexity and dialectal variation), computational morphology, information extraction.	
EDUCATION	Johns Hopkins University Ph.D. in Computer Science 2016 – Present Affiliation: Center for Language and Speech Processing Advisor: Kevin Duh M.S.E. in Computer Science 2016 – 2018 University of Chicago 2010 – 2014 B.S. in Computer Science Research with John Goldsmith on Unsupervised Computational Morphology <i>Also completed coursework at Harvard Extension School (2009 – 2010)</i>	
EMPLOYMENT	Google Translate 2019 Research Intern Supervisor: Qi Ge Human Language Technology Center of Excellence 2018 SCALE Summer Workshop Participant Supervisors: Kevin Duh, Chris Callison-Burch Worked on a team advancing domain adaptation for neural machine translation. Focused on methods for utilizing additional web-crawled parallel data, exploring both cleaning methods and domain-selection methods. Raytheon BBN Technologies 2014 – 2016 Associate Scientist Supervisor: Elizabeth Boschee Updated and improved the group’s information extraction system and adapting it for new purposes. Predicted news trends and applied sentence compression. Undergraduate Intern 2013 Supervisor: Ryan Gabbard Explored deep learning methods for information extraction. Implemented denoising autoencoders and t-distributed stochastic neighbor embedding. Undergraduate Intern 2011 Supervisor: Marjorie Freedman Built a visualization tool for the group’s information extraction system.	
CURRENT PROJECTS	<ol style="list-style-type: none">1. Methods for neural machine translation of Arabic dialects with Kevin Duh.2. Improving sentence alignment for web-crawled bitexts with Philipp Koehn.	

PUBLICATIONS

1. Adithya Renduchintala*, **Pamela Shapiro***, Kevin Duh, Philipp Koehn. *Character-Aware Decoder for Neural Machine Translation*. Under review for Machine Translation Summit, 2019. [***Equal contribution**]
2. **Pamela Shapiro** and Kevin Duh. *Comparing Pipelined and Integrated Approaches to Dialectal Arabic Neural Machine Translation*. North American Chapter of the Association for Computational Linguistics (NAACL) Workshop on NLP for Similar Languages, Varieties and Dialects (VarDial), 2019.
3. Xuan Zhang, **Pamela Shapiro**, Gaurav Kumar, Paul McNamee, Marine Carpuat and Kevin Duh. *Curriculum Learning for Domain Adaptation in Neural Machine Translation*. North American Chapter of the Association for Computational Linguistics (NAACL) (Long), 2019
4. **Pamela Shapiro** and Kevin Duh. *BPE and CharCNNs for Translation of Morphology: A Cross-Lingual Comparison and Analysis*. arXiv:1809.01301, 2018.
5. Shijie Wu, **Pamela Shapiro**, Ryan Cotterell. *Hard Non-Monotonic Attention for Character-Level Transduction*. Conference on Empirical Methods in Natural Language Processing (EMNLP) (Long), 2018.
6. **Pamela Shapiro** and Kevin Duh. *Morphological Word Embeddings for Arabic Neural Machine Translation in Low-Resource Settings*. North American Chapter of the Association for Computational Linguistics (NAACL) Workshop on Subword and Character-Level Modeling (SCLeM) (Long), 2018. **Best Paper Award**

TEACHING

Johns Hopkins University

Machine Learning (EN.601.475)

Fall 2018

Role: Teaching Assistant

Professor: Mark Dredze

Led recitations every third week, wrote some of the homeworks, and held office hours. Gave substitute lectures on SVMs and Boosting.

FELLOWSHIPS, AWARDS

Jun Wu and Yan Zhang Graduate Student Fellowship

2016

Awarding body: Johns Hopkins University Department of Computer Science

Critical Language Scholarship for Intermediate Arabic

2012

Awarding body: U.S. Department of State

Fully-funded 8-week intensive Arabic program in Tangier, Morocco. Achieved Advanced Low on ACTFL Oral Proficiency Interview.

SERVICE

Professional Service

- Program Committee, COLING 2018
- Program Committee for ML Track, NAACL 2019

Community Service

- Organizer for North American Computational Linguistics Olympiad at JHU

SKILLS

Programming Skills: Proficient: Python, Java, PyTorch. Familiar: C, Matlab, Theano.

Natural Languages: Native: English. Advanced: Arabic, Latin. Novice: Hebrew.

Graduate Coursework: Machine Translation, Natural Language Processing, Machine Learning, Machine Learning: Data to Models (Graphical Models), Machine Learning: Linguistic & Sequence Modeling, Matrix Analysis and Linear Algebra, Parallel Programming, Advanced Topics in Data Intensive Computing.