

## EMILY TAGTOW

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### EDUCATION

#### CARNEGIE MELLON UNIVERSITY 2017

Masters of Science in Language Technologies

*Selected Coursework:* Algorithms for NLP, Machine Translation, Machine Learning, Deep Learning, Language & Statistics, Conlanging

#### UNIVERSITY OF TEXAS AT AUSTIN 2015

Bachelor of Arts in Linguistics with Honors, GPA: 3.9

*Thesis:* A Stratified Analysis of Lexical Substitution Models

### SKILLS

- *Programming Languages:* Python, Scala, C++, R, Processing
- *Toolkits:* Scikit Learn, NLTK, DyNet, Cdec
- *Frameworks:* Git, Heroku, Hadoop, MapReduce
- *Natural Languages:* Proficiency in French, intermediate knowledge of Japanese

### EXPERIENCE

#### EBREVIA: NLP ENGINEER 2017 - PRESENT

- Built out support for four new languages in the machine learning backend of the product
- Reconfigured the product to be more amenable to expanded language support in the future
- Improved information extraction accuracy across several key provisions through feature engineering

#### PEOPLE PATTERN: DATA SCIENTIST 2014 - 2015

- Implemented a distributional similarity model to generate content for client-facing presentations
- Designed a lexical translation model to be used as a feature in multilingual classification
- Performed error analysis on demographics classifiers to inform feature engineering

### RESEARCH

#### DARPA LORELEI: MACHINE TRANSLATION RESEARCHER 2016 - 2017

- Led the development of an end-to-end machine translation pipeline under an aggressive timeline
- Leveraged multilingual corpora to bolster low-resource neural translation using DyNet
- Incorporated morphological information into an SMT model to improve translation scores in Uyghur by several BLEU points

#### ACL 2016 FIRST CONFERENCE ON MACHINE TRANSLATION 2016

- Developed a neural network architecture in DyNet for disambiguating Turkish morphological parses
- Extended this architecture to use varying degrees of contextual information when disambiguating
- Achieved state of the art accuracy for disambiguation in several morphologically complex languages

### AWARDS & PUBLICATIONS

2016 *COLING Publication:* [The Role of Context in Neural Morphological Disambiguation](#)

2015 Dean's Distinguished Graduates, honorable mention

2015 Rapoport-King Thesis Scholarship

2013 *ASA Publication:* [Familiarity with a Foreign Accent Aids Perceptual Accent Adaptation](#)

2011 - 2015 Dean's Honors: Magna Cum Laude