

# Curriculum Vitae

## Austin Blodgett

1322 Fort Myer Dr., Apt. 914  
Arlington, Virginia

ajb341@georgetown.edu  
(865) 518-1520

---

### EDUCATION

**Georgetown University**, Washington, D.C.  
*Master of Science in Computational Linguistics*  
*Ph.D. Candidate of Computational Linguistics*  
Overall GPA: 3.866/4.000

August 2016 – Present

**Emory University**, Atlanta, GA

*Bachelor of Science - Double Major in Computer Science (With Highest Honors) and Linguistics*  
Overall GPA: 3.902/4.000

May 2015

### LANGUAGE PROFICIENCY

*Native Language:* English

*Intermediate Level:* Japanese (2.5 Years of Courses)

*Basic Level:* Russian, Hebrew, Latin, Spanish

### TECHNICAL SKILLS

*Languages:* Java, C, C++, Python, SQL, R

*Operating Systems:* Unix, Linux, Mac OS, Windows

*Computational Linguistics/Natural Language Processing Libraries and Software:*

Pytorch, Keras, Stanford Syntactic Parsers, Tregex (syntactic tree manipulation), ClearNLP Dependency Parser, WordNet, VerbNet, NLTK Library, Word2Vec, Latent Dirichlet Allocation, Annis for Multi-Layer Corpora.

### RELEVANT GRADUATE LEVEL COURSEWORK

- CS 571 Natural Language Processing (Emory)
- COSC 572 Empirical Methods in NLP
- LING 367 Computational Corpus Linguistics
- COSC 575 Machine Learning
- LING 469 Analyzing Language Data with R
- COSC 672 Adv. Semantic Representations
- LING 461 Speech Processing
- COSC 482 Statistical Machine Translation
- LING 485 Cognitive Grammar
- ANLY 590 Neural Nets and Deep Learning

### Key Publications

Ramon Astudillo, Miguel Ballesteros, Tahira Naseem, Austin Blodgett, & Radu Florian (2020). *Transition-based Parsing with Stack-Transformers*. In Proc. of the 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP).

Austin Blodgett and Nathan Schneider (2019). *An Improved Approach for Semantic Graph Composition with CCG*. In Proc. of the 13th International Conference on Computational Semantics, Gothenburg, Sweden.

Austin Blodgett and Nathan Schneider (2018). *Semantic supersenses for English possessives*. In Proc. of LREC, Miyazaki, Japan.

Nathan Schneider, Jena D. Hwang, Vivek Srikumar, Jakob Prange, Austin Blodgett, Sarah R. Moeller, Aviram Stern, Adi Bitan, and Omri Abend (2018). *Comprehensive Supersense Disambiguation of English Prepositions and Possessives*. In Proc. of ACL (pp. 185-196).

## **RELEVANT WORK EXPERIENCE**

### **Georgetown University, Dept. of Linguistics**

*Research Assistant*

August 2016 – Present

- *GME Project* – The Gradable Modal Expression (GME) Corpus is a large database of English text annotated for linguistic modality. I have helped implement GME’s design, search, and display features.
- *Supersense Project* - semantic supersense corpus and schema for annotating the semantics of prepositions and other grammatical relations. The schema includes location, time, and thematic roles and allows construal of semantics in a metaphorical frame, consistent with interpretations of semantics as embodied cognition. One result of this project is my LREC 2018 paper on expanding application of these supersenses to possessive constructions.
- *Semantic Parsing* – A core focus of my research is on computational representations and parsing of language meaning. I have conducting research on alignment, theory, and parsing of Abstract Meaning Representation (AMR), a prominent formalism for computational representation of sentence meaning. My research in this area has resulted in two publications – the first at IWCS 2019 and the second at Findings of EMNLP 2020. Ongoing research includes improved and comprehensive alignment, improving evaluation, and incorporating syntactic features into parsing models.

*Teaching Assistant*

January 2018 – Present

- Teaching assistant for the graduate-level course *Empirical Methods in Natural Language Processing*
- Duties included giving guest lectures, designing homework, grading written assignments and code, advising student on course projects, working with students in office hours and elsewhere to understand course material.

### **International Business Machines (IBM), - Yorktown Heights, NY.**

June 2019 – August 2019

*Research Intern*

- Intern in the Multilingual Natural Language Processing Group conducting research on semantic parsing.
- *Project, Semantic Parsing* – The main focus of the internship was research on Abstract Meaning Representation (AMR) parsing using a transition-based framework and sequence-to-sequence neural network models.
- Duties included writing software, designing and conducting experiments, and presenting research to an audience of IBM employees.
- *Software Experience*, extensive experience with two neural network software libraries Pytorch and Dynet as well as experience working with sequence-to-sequence neural network models and transformers.

### **International Justice Mission (IJM)**

June 2017 – August 2017

*Research & Data Intern*

- Intern for an anti-slavery non-profit organization - IJM - in the department for Research & Data.
- Duties included data analysis of donation information with tools from machine learning, and leading a workshop on *Data Analysis with R*.

### **Mind and Language Lab, - Emory University, Dept. of Psychology**

August 2013 – July 2016

*Research Assistant*

- *General description* – Design and oversee various research projects with computational domains, including individual and group research. Research fields include Computational Linguistics, Natural Language Processing, Word Meaning Representation, and Distributional Semantics.

- *Software Experience*, Re-implementing Latent Dirichlet Allocation (LDA) – LDA is a learning algorithm designed as a probabilistic graphical model, most commonly used for topic modelling. My re-implementation of LDA is in Java (see *Verbiverse*).
- *Software Experience*, Re-implementing Word2vec – Word2vec is Google’s algorithm for learning and encoding word meanings as vector representations using a neural network. My re-implementation of Word2vec is in Java.
- *Project, Verbiverse* – Our aim of the Verbiverse project was to build a library of vector representations of verb meanings, arranged by similarity. The project is based on two large corpora – Wikipedia and New York Times – along with several natural language processing and machine learning methods, such as LDA and word2vec.
- *Project, Triad Evaluation Task* – Our Triad Evaluation Task was developed as way of evaluating machine judgements of verb similarity against human judgements of similarity.

**Emory University, Dept. of Linguistics**

January 2016 – May 2016

*Teaching Fellow*

- Teaching Fellow at Emory for two sections of the course *Ling 401: Language, Mind & Society*.
- Duties included leading class discussions, grading essays, and meeting with students to talk about possible paper topics.

**Electric Power Research Institute (EPRI), Knoxville, Tennessee**

June 2013 – August 2013

*Intern*

- Researched and compiled reports of newly developed electric-power technology to compare capabilities and restrictions. Research included interviews of electric-power developers.
- Designed and Implemented code for database and data mining related tasks, and general data analysis.

**HONORS**

- Highest Honors in Computer Science (for a thesis in computational linguistics)
- *Honors Thesis*, “The Verbiverse: Creating a Verb Space with Comparative Methods of Distributional Semantics”, <https://etd.library.emory.edu/view/record/pid/emory%3Aapjw0g>  
Committee: Dr. Jinho Choi (Thesis advisor), Dr. Phillip Wolff, Dr. Marjorie Pak
- Award for Excellence in the Study of Linguistics (Awarded to one senior per graduating class)
- Gretchen V and Raymond B Squires Memorial Scholarship (\$35,000)
- Phi Beta Kappa, Honors Society
- Phi Sigma Iota, International Foreign Language Honor Society
- Emory College of Arts & Science Dean’s List (6 Semesters)
- Valedictorian, William Blount H.S. class of 2011
- PSAT Commended Scholar
- Questbridge Finalist

**CAMPUS AND COMMUNITY ENGAGEMENT****Emory Linguistics Circle - Founding Member**

January 2013 – May 2015

**Emory NLP Research Group - Member**

October 2014 – May 2015

**Emory Chapter of Quest Scholars - Member**

September 2011 – May 2015

**Emory RUF - Member**

September 2011 – May 2015

**Head Start – Volunteer**

May 2014 – Present

**Clarkston Middle School Tutoring**

January 2015 – May 2015