

**Wesley Orth**

(816)-500-8635 • wesleyorth2022@u.northwestern.edu

## Education

---

**NORTHWESTERN UNIVERSITY**  
**Doctor of Philosophy, Linguistics****EVANSTON, IL**  
**Anticipated Spring 2022****UNIVERSITY OF ROCHESTER**  
**Bachelors of Science, Brain and Cognitive Science**  
**Bachelors of Arts, Linguistics**

- Cumulative GPA 3.89/4.00

**ROCHESTER, NY**  
**Spring 2017**  
**Spring 2017**

## Presentations

---

**Wesley Orth**, Amanda Pogue, Chigusa Kurumada (2017). The role of context and information in the interpretation of scalar adjectives. CUNY Conference on Sentence Processing.

**Wesley Orth**, Amanda Pogue, Chigusa Kurumada (Accepted). Contextual factors in child adjective comprehension. National Conference on Undergraduate Research.

Madeline Clark, Graeme McGuire, Najia Khaled, Miriam Kohn, Cameron Morgan, **Wesley Orth**, Anthony Vaccaro, Solveiga Armoskaite (2016). Let's talk X. Dimensions of D Workshop.

## Awards and Honors

---

**NORTHWESTERN UNIVERSITY**

- Data Science Fellowship

**EVANSTON, NY**  
**Spring 2017****UNIVERSITY OF ROCHESTER**

- Professors' Choice Award for Undergraduate Research
- Discover Grant for Undergraduate Research
- Research and Innovation Grant for Undergraduate Research
- Stephen Harrison GRADE Scholarship
- Dean's List all eligible semesters

**ROCHESTER, NY**  
**Spring 2017**  
**Spring 2016**  
**Fall 2013**  
**Fall 2013-Spring 2017****BOY SCOUTS OF AMERICA**

- Eagle Scout Award

**LEE'S SUMMIT, MO**  
**Winter 2012**

## Laboratory and Research Experience

---

**UNIVERSITY OF ROCHESTER**  
**Kinder Lab – Research Assistant****ROCHESTER, NY**  
**Summer 2016 - Spring 2017**

- Supervisors: Prof. Chigusa Kurumada and Prof. Scott Grimm
- Created an original study to investigate aspects of adjective learning

- Worked with children to investigate child language acquisition
- Devised stimuli and analyzed data relevant to a variety of projects in acquisition

### **Human Language Processing Lab – Research Assistant**

**Winter 2016 - Spring 2017**

- Supervisor: Prof. Tim Florian Jaeger
- Programed eye-tracker experiments in Python using pygaze and psychopy packages
- Examined current research in adaptation and speech processing
- Developed visual and auditory stimuli for use in experiments investigating syntactic and phonetic adaptation

## **Laboratory and Research Experience Continued**

---

### **Morphosyntax Research Group**

**Fall 2015 - Fall 2016**

- Supervisor: Solveiga Armoskaite
- Analyzed syntactic, pragmatic and prosodic properties in idiomatic “talk” constructions
- Created program to scan for instances of “talk” constructions on twitter and export tweet text for analysis
- Presented a Poster at Dimensions of D workshop

## **Research Projects**

---

### **Adjective Learning and Scalar Accommodation**

**Summer 2016 - Present**

- Independent study through the University of Rochester Kinder Lab
- Pitched a research proposal to investigate the learning of scalar adjectives in children
- Developed an experiment to investigate comprehension of several adjective types
- Prepared visual stimuli through use of image editing software
- Created an online form of the study for adults using Qualtrics and Mechanical Turk

### **Pupilometry**

**Summer 2016 – Fall 2016**

- Research through Human Language Processing Lab to investigate arousal response to syntactic structures
- Created program using Python to access eye-tracker pupil diameter measurement capability
- Tested various display types to understand how the eye responds to kinds of visual stimuli
- Performed data analysis and visualization on pupil reactions using collected data and R

### **Ambiguous Sentence Processing**

**Winter 2016 – Fall 2016**

- Research through Human Language Processing Lab to investigate eye movements in reaction to ambiguous sentences with corresponding displays
- Created Python script to run experiments and collect data with an eye-tracker
- Created audio stimuli of the sentences to use along with visual display in the experiment

### **Haskell Implementation of Mass/Count Semantics**

**Fall 2015**

- Project as a part of the course Computational Semantics

- Interpreted competing semantic accounts for the semantic behavior of mass and count nouns
- Devised a system in Haskell to perform model based, truth value semantic operations
- Combined formal work in semantics with Haskell system to create a detailed implementation of mass/count behavior as well as plural and part-whole relations

### **Role of Acoustic Information in the Feature Hierarchy**

**Fall 2015**

- Research as a part of Lab in Development and Learning
- Proposed experiment to investigate children's use of sound symbolism in object classification
- Adapted forced choice paradigm to test acoustic information against shape bias in categorization
- Networked with a local day-care to run children in the experiment

## **Relevant Course Work**

---

UNIVERSITY OF ROCHESTER

ROCHESTER, NY

- Language Courses: Formal Semantics, Phrase Structure Grammar, Language Use and Understanding, Language Development, Computational Semantics, Syntactic Theory
- Cognitive Science Courses: Lab in Development and Learning, Language and Psycholinguistics, Cognition, Language and the Brain, Perception and Action
- Statistics and Programming Courses: Data Science for Linguists, Applied Statistics for the Physical and Biological Sciences, The Art of Programming

## **Advising and Teaching Experience**

---

UNIVERSITY OF ROCHESTER

ROCHESTER, NY

### **Computer Science Workshop Leader**

**Fall 2015-Fall 2016**

- Facilitated weekly group learning sessions for an introductory computer science course
- Cultivated the use of group problem solving strategies to address problems in computer science
  - Discussed good practice for programming in Python and standards of syntax and notation

### **Conference Chaperone**

**Summer 2015**

- Provided supervision for over 200 students attending the 2015 International Baccalaureate Student World Conference
- Supported at a variety of community outings and functions as point of contact for students
- Worked directly with a community of ten students to promote networking and cultural exchange

### **Pre-College Counselor**

**Summer 2015**

- Created exciting and relevant programming activities for high-school aged students
- Provided residential advisor services for a group of over two-hundred students
- Performed clerical duties for the university admissions office
- Supervised off-campus fieldtrips, move-in and move-out days, and other activities

### **Linguistics Workshop Leader**

**Spring 2015**

- Coached students to develop effective teamwork and learning strategies
- Trained in latest best practice for teaching and facilitating group learning
- Presented real problems and practical solutions to problems in linguistics

**Peer Career Advisor**

**Fall 2014 – Spring 2017**

- Guided students through career development, resume writing, networking and other career related topics
- Produced resources for students and utilize online databases
- Delivered several presentations on career preparedness for undergraduate students

## **Skills and Qualifications**

---

- Experienced with use of Python, R, and Haskell
- Proficient in use of Mechanical Turk, Qualtrics, Praat, and language corpus analysis
- Knowledgeable in experimental design, methods, and statistics
- Understanding of human cognition and language demonstrated by lab work and courses