

Elizabeth Lee

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Contact/Personal

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Education

University of Rochester, Rochester, NY | 2017 - 2019

Master of Science in Computational Linguistics

Thesis: "Towards an Improved Lexicon of Relational Nouns"

Coursework: *Natural Language Processing, Intro to Computational Linguistics, Machine Learning, Data Science for Linguistics, Logical Foundations of AI, Tools for Language Documentation, Intro to Semantic Analysis, Formal Semantics*

University of Florida, Gainesville, FL | 2012 - 2016

Bachelor of Arts in Linguistics, Magna Cum Laude

Thesis: "The Effects of Segmentation on the Processing of Binomial Expressions"

Minor in East Asian Languages and Literatures: Japanese

Relevant coursework: *Applications of Discrete Structures, Programming for CIS Majors 1, Programming Fundamentals II, Second Language Acquisition, Psycholinguistics*

Interests

Natural language processing, software engineering, UX design, artificial intelligence, semantics, second-language acquisition

Work Experience

Research Engineer I, USC Information Sciences Institute | 2019 -

- Worked with a team to build a web application for schema curation using the Angular framework
- Wrote scripts to convert system output data between different formats (including XML, JSON, internal formats from RDF)
- Containerized software via Docker and assembled those components into scientific workflows
- Used Git for version control and CI
- Built a demo application using the Dash framework to display system output with interactive components
- Collaborated on and used third-party tools to build semantic extraction systems
- Developed web tools for annotation using Flask, Vue.js, and SQL
- Wrote and edited scripts in Python, Kotlin, and Bash to extract and process annotation data
- Trained and managed linguistic annotators after interviewing and selecting them for employment

Linguistics Graduate Research Assistant, Quantitative Semantics Lab at UR | 2018 - 2019

- Wrote and edited scripts primarily in Python to process large amounts of corpus data
- Collaborated with students in linguistics and computer science
- Used results of error analyses to find and fix issues in code and increased accuracy of generated data
- Implemented third-party code to add new features to datasets

Computer Science Graduate Research Assistant, TRIPS Lab at UR | Spring 2019

- Assisted with NLP research by investigating experimental designs and results of projects regarding automated question generation

Teaching Assistant for Intro to Semantic Analysis, University of Rochester | Fall 2018

- Helped students better understand the course and the material through electronic correspondence or one-on-one meetings
- Gave lectures when professor was away
- Graded course assignments

Laboratory Assistant, National High Magnetic Field Laboratory at FSU | Summer 2012, 2013

- Prepared samples for microanalysis (polishing, ion milling, other miscellaneous tasks)
 - Stitched together photos taken via microscope
 - Created slideshow presentations to present research findings
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Computer Skills

Programming/Coding

- Coded several small projects for coursework or personal use in **C++**, **Java**, **Lisp**, and **Python**
- Practiced **Haskell**, **MATLAB**, **MIPS**, **R**, **Ruby**, and **SQL** through coursework or self-study
- Created personal website from scratch with **HTML**, **CSS**, and **JavaScript** (elizlee.github.io)
- Wrote simple Android apps in **Kotlin**

Software/Misc.

- Annotated and documented natural language data (Praat, ELAN, FLEEx)
 - Used game engines to create simple games (RPG Maker, RenPy)
 - Created and edited videos (WMM, YouTube, Instagram)
 - Edited audio files (Audacity, Melodyne)
 - Modeled virtual 3D objects (AutoCAD, SolidWorks, SketchUp)
 - Edited images and created digital art (Adobe Photoshop, PhotoScape, Krita, Paint.NET)
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Involvement

Undergraduate Research Assistant, Brain and Language Lab at UF | 2015 - 2016

- Researched and gathered materials for linguistics experiments
- Edited scripts in Python and R such that they were appropriate for use in different projects
- Ran a psycholinguistics experiment as the basis for an undergraduate thesis which was awarded with high honors
 - Gathered materials through COCA (Corpus of Contemporary American English)
 - Scheduled appointments with participants
 - Recorded and analyzed data using Microsoft Office, E-Prime, and RStudio

UF Computational Linguistics Club | 2015—2016

- Learned how to use Python's NLP Toolkit (NLTK)

Japanese Club at UF | 2012—2016

- Treasurer | 2015 – 2016
 - Kept track of club's budget and efficiently used funds
 - Organized the Spring Festival Fashion Show
- Creative Director | 2014 – 2015
 - Taught students how to make Japanese-themed crafts
 - Obtained and created decorations for club events
- Co-Dance Team Coordinator | 2013 -2014
 - Choreographed and taught Japanese dances for performances

Kakehashi Project (promoted by Japan's Ministry of Foreign Affairs) | December 2015

- Selected to participate in a youth exchange program from a pool of applicants
 - Visited several locations in Japan, interacted with Japanese university students, and participated in homestay
 - Prepared slideshows for our school's presentations
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Projects

“Positive anymore” project for Data Science for Linguistics (Spring 2018)

- Worked with a team of three on a project regarding the use of positive anymore across geographic regions
- Extracted instances of positive anymore by web scraping from geographically associated subreddits

“A Study of Modern Spoken Tamil” for Tools for Language Documentation (Fall 2017)

- Teamed up with two classmates and a native speaker of Tamil on a semester-long language documentation project
- Transcribed and annotated language data using Praat, ELAN, and FLEx

“Class Escape” for Programming Fundamentals II (Fall 2014)

- Collaborated with a team of five to create simple video game in C++
 - Compromised on development plans through the course of several in-person and Skype meetings
 - Introduced the team to SFML and ultimately used it in the game's development
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Publications

Kametani, F., **Lee, E. G.**, Shen, T., Lee, P. J., Jiang, J., Hellstrom, E. E., and Larbalestier, D. C. “**An Explanation of How Split Melt Processing Can Enhance the Critical Current Density of Bi2212 Round Wires Based on Examination of Bubble Size and Density Formed in the Melt**” *Superconductor Science and Technology* 27, no. 5 (2014): 055004.

Foreign Languages

Japanese

- Studied Japanese for six semesters
- Member of the Japanese National Honor Society - College Chapter (2016)
- Intermediate-level reading and speaking ability

Mandarin Chinese

- Studied Chinese for two semesters
- Elementary-level reading and speaking ability