

TYLER W. CARSON

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EDUCATION

University of California, Los Angeles	Los Angeles, CA
M.A. Linguistics <i>GPA: 4.00</i>	Sep 2018 - Jun 2019
B.A. Linguistics and Computer Science <i>GPA: 3.69</i>	Sep 2015 - Jun 2019
Crafton Hills College	Yucaipa, CA
A.A. Japanese Language and Culture <i>GPA: 3.91</i>	Sep 2013 - Jun 2015

COURSEWORK

Phonetics · Phonology · Syntax · Semantics · Computational Linguistics · Programming Languages ·
Formal Languages & Automata Theory · Algorithms · Mathematical Structures in Language

EXPERIENCE

UCLA Linguistics	Los Angeles
<i>Undergraduate Researcher</i>	Jul 2017 - Oct 2018
<ul style="list-style-type: none">Conducted research on the relationship between surprisal and entropy reduction as measures of complexity for natural language.Developed software in OCaml for calculating the complexity of grammar in natural language sentences using concepts based in information-theory.Contributed code for calculating the entropy of a probabilistic formal grammar.	

PROJECTS

Analysis of Uyghur Vowel Harmony	<i>PRAAT, Python, Excel</i>
<ul style="list-style-type: none">Measured phonetic qualities of consultant-provided audio data using PRAAT.Performed corpus study of written Uyghur analyzing properties of backness harmony.	
Web Scraper for Corpus Work	<i>Python, Scrapy, Tkinter</i>
<ul style="list-style-type: none">Built web scraper using Python's Scrapy module to generate a corpus of written Uyghur.Implemented corpus data processing tools including regex search tool and Arabic/Latin transliterator.	
Part of Speech Tagger	<i>Python, NLTK</i>
<ul style="list-style-type: none">Developed a part of speech tagger for untagged corpora using Python Natural Language Tool-Kit.Model training was done using the open-source maximum entropy algorithm MegaM.	
Text Based / Rogue-Like RPG	<i>C++, NCurses</i>
<ul style="list-style-type: none">Designed and implemented a game-engine for a terminal-based RPG using C++ and nCurses library.	

SKILLS

Tools / Environments:	PRAAT, Audacity, Git, UNIX, L ^A T _E X, Excel, Google Docs
Programming Languages:	C, C++, Python, Bash, OCaml, Haskell
Natural Languages:	English (fluent, native)
	German (working proficiency)
	Japanese (elementary proficiency)
	Swedish (elementary proficiency)

HONORS AND AWARDS

UCLA Linguistics Departmental Scholar	Spring 2018
Selected by UCLA Linguistics Faculty to complete 1-year master's program.	
UCLA Honors Summer Research Stipend	Summer 2018
UCLA College Honors Program	Fall 2015 - Present
Crafton Hills College - Honors College Graduate	Spring 2015