EDUCATION

University of Massachusetts, Amherst, MA

GPA: 3.98

website: canders1.qithub.io

PhD, Linguistics, 2021 (expected)

Swarthmore College, Swarthmore, PA

GPA: 3.93

Bachelor of Arts in Linguistics and minor in Computer Science with High Honors, 2014

Relevant coursework: Data Structures and Algorithms, Natural Language Processing, Discrete Mathematics, Artificial Intelligence, Theory of Computation, Programming Languages, Formal Foundations of Linguistic Theory, Inferential Statistics

AWARDS

Selkirk Linguistics Outreach Fund Grant (2016); Fulbright Research Scholar (2014-2015); The Linguistics Prize in Applications of Theory, Swarthmore College (2014); Computing Research Association Outstanding Undergraduate Researchers Award Finalist (2014); National Merit Scholar (2010)

EXPERIENCE

Teaching Assistant, Cognitive Modeling, University of Massachusetts

Fall 2017-present

- Teach weekly R and Python programming sessions for graduate students
- Grade programming assignments covering modeling techniques like parsing, neural networks, and clustering.

Graduate Researcher, University of Massachusetts

2015-present

- Design online psycholinguistics experiments and perform statistical analysis of the results in R
- Wrote a JavaScript controller for comic captioning tasks to be used on the Ibex Farm platform for online psycholinguistics experiments
- Developed a computational learner for cophonologies in Python

Research Assistant, Seth Cable, University of Massachusetts

Spring & Summer 2017

- Produced 60 hours of archival recordings of Western Tlacolula Valley Zapotec during two summers of fieldwork in rural Oaxaca, Mexico
- Supervised an undergraduate assistant in developing elicitation materials for fieldwork
- Applied web- and text-scraping techniques in order to build corpora of Western Tlacolula Valley Zapotec languages, a family of endangered languages with low online usage

Research Assistant, Gaja Jarosz, University of Massachusetts

Fall 2016

- Improved the efficiency of expectation- and error-driven learners for phonological modeling
- Built a JavaFX GUI and command-line user interface for computational modeling tools

Fulbright Fellow, University of Victoria and McGill University

2014 - 2015

- Conducted research on technology and First Nations language revitalization under supervision of Leslie Saxon and Jessica Coon
- Served as the technical lead for learn.migmaq.org, a web application for learning Mi'gmaq, an endangered First Nations language, as part of a collaboration with the Listuguj Mi'gmaq community
- Worked with Mi'gmaq community educators on curriculum design and provided technical training to community members to allow them to continue developing the website

Research Assistant, Ticha Digital Humanities Project, Haverford College

Summer 2014

- Designed and built a new website for Ticha, a digital humanities project that presents texts in Colonial Zapotec, an indigenous Mexican language
- Transcribed sections of the Arte en Lengua Zapoteca, a 16th century grammar of Colonial Zapotec and encoded them in the TEI, the XML standard for digital humanities projects
- Developed content to explain the language and its cultural context to a range of audiences.

Research Intern, Nate Foster, Computer Science Department, Cornell University Summer 2013

- Worked on NetKAT, a domain-specific language (DSL) for programming network devices
- Developed network reachability tests for NetKAT programs
- Proved NetKAT's equational theory sound using the Coq proof assistant
- Presented at ACM Symposium on Principles of Programming Languages (POPL) 2014

Researcher, Rabat, Morocco

Spring 2012

- Designed and carried out independent research on Moroccan sociolinguistics
- Administered 90 surveys in three languages and translated results from French and Arabic
- Performed qualitative and quantitative analysis on the results to draw conclusions about the language usage and attitudes of Moroccan university students

TECHNICAL SKILLS C++, Coq, CSS, Haskell, HTML, Java, JavaScript, Python, R, Racket, XML, XSLT

LANGUAGES

Bangla (beginning), French (advanced), German (intermediate), Modern Standard Arabic (intermediate), Spanish (intermediate), Western Tlacolula Valley Zapotec (fieldwork)

Carolyn Jane Anderson

Talks and Publications

Anderson, Carolyn Jane, The San Lucas Quiaviní Zapotec Andative and Venitive. To be presented at the Society for the Study of Indigenous Languages of the Americas (SSILA) annual meeting, 2018.

Anderson, Carolyn Jane, The Andative and Venitive Construction in San Lucas Quiaviní Zapotec. To be presented at Multi-Verb Constructions: Semantic, Syntactic and Typological Perspectives (MVC), 2017.

Anderson, Carolyn Jane and Brook Danielle Lillehaugen, Negation in Colonial Valley Zapotec. Transactions of the Philological Society 114(3): 391-413.

Anderson, Carolyn Jane and Brook Danielle Lillehaugen, The Morphosyntax of Negation in Colonial Valley Zapotec. Presented at the Society for the Study of Indigenous Languages of the Americas (SSILA) annual meeting, 2015.

Anderson, Carolyn Jane and Brook Danielle Lillehaugen, La morfosintaxis de la negation en el zapoteco del Valle colonial. Presented at Coloquio sobre Lenguas Otomangues y Vecinas (COLOV) IV: Mario Molina Cruz, 2014.

Carolyn J. Anderson, Nate Foster, Arjun Guha, Jean-Baptiste Jeannin, Dexter Kozen, Cole Schlesinger, and David Walker, NetKAT: Semantic Foundations for Networks ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages (POPL), 2014.

Anderson, Carolyn Jane, Language Ideology and Human Rights Doctrine in Morocco. Presented at New Ways of Analyzing Variation (NWAV) 42, 2013.

Anderson, Carolyn Jane, I Talk it and I Feel it: Language Attitudes of Moroccan University Students. Undergraduate thesis, Swarthmore College, 2013.