website: canders1.qithub.io

GPA: 3.93 | in major GPA: 3.96

EDUCATION

University of Massachusetts, Amherst, MA

PhD, Linguistics, 2021 (expected)

Swarthmore College, Swarthmore, PA

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

in Linguistic Theory, Statistical Inference in Psychology II

Awards

Selkirk Linguistics Outreach Fund Award Recipient (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

Graduate Researcher, University of Massachusetts

2015-present

- Restructured computational tools for phonological modeling as a research assistant for Gaja Jarosz
- Built a Java GUI and command-line user interface for the computational modeling tools
- Applied web- and text-scraping techniques to under-resourced languages in order to build a corpus of Western Tlacolula Valley Zapotec, an endangered, low-literacy language of Oaxaca, Mexico
- Produced 60 hours of archival recordings of Western Tlacolula Valley Zapotec during two summers of fieldwork in rural Oaxaca
- Designed Mechanical Turk experiments to learn about natural language semantics and performed statistical analysis of the results in R

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, an online language-learning website for Mi'gmaq developed as part of a collaboration between McGill and 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

- Transcribed sections of the Arte en Lengua Zapoteca, a 16th century grammar of Colonial Zapotec
- Encoded the transcribed Arte in TEI, the XML standard for digital humanities projects
- Designed new website for the Ticha project and developed content to explain the language and its cultural context to a range of audiences.

Research Assistant, Linguistics Department, Swarthmore College

Spring 2014

- Worked with Professor Brook Lillehaugen on Colonial Valley Zapotec, an indigenous Mexican language
- Transcribed, analyzed, and translated Colonial Valley Zapotec texts into English.
- Expanded the FLEx database of Colonial Valley Zapotec texts.

Research Intern, Computer Science Department, Cornell University

Summer 2013

- Worked with Professor Nate Foster on Frenetic, a network programming language
- Proved soundness of language's equational theory with respect to its denotational semantics in the Cog proof assistant
- Developed tests for reachability properties by relating the denotational semantics to a language model

Independent 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 and Brook Danielle Lillehaugen, Negation in Colonial Valley Zapotec. To appear in the Transactions of the Philological Society.

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.

SERVICE

Graduate Representative to Faculty Meetings, University of Massachusetts Amherst 2016-2017 Reader, Voces del Valle Project 2017

- Supported Valley Zapotec speakers on Twitter

Member, Women in Computer Science, Swarthmore College

2012-2014