Matthew N. Czuba • [czu.ba](czu.ba) • czuba@ucla.edu • https://www.linkedin.com/in/matthewczuba • talk@czu.ba ( )

Interests: innovation in generative AI, LLMs, natural language syntax/semantics, AI-driven NLP & parsing systems

Career Statement:

Driven technologist and skilled AI researcher with a unique blend of academic depth, technical engineering skills, and commercial intelligence. My foundation in theoretical linguistic model research (yielding 9 publications across 6 languages) complements hands-on experience engineering NLP parsing systems at Melange, where I've implemented in-house grammatical models and LLM prompting strategies for complex programmatic linguistic tasks in patent AI. This technical expertise is enhanced by my proven GTM record at Speechmatics, where I exceeded targets by 160% while serving as a strategic cross-functional technical sales liaison between Product, Marketing, and Finance teams. My unique focus resides not only in building and shipping innovative AI solutions for enterprise but also in their effective translation from technical capability into compelling business narratives that drive real-world adoption. I deliver full product lifecycles from bleeding-edge research conception through to practical implementations that showcase measurable, rapid time-to-value.

Melange Technologies • NLP Research Engineer • *November 2024–present*

 ➢ **AI System Architecture:** Designed and implemented core components of Melange's natural language parsing pipeline, creating production-quality NLP systems from theoretically-driven context-free grammar modelling and algorithmic design.
 ➢ **Research to Production:** Successfully bridged generative theoretical linguistic research with practical engineering, implementing novel grammar-based parsing solutions that outperform traditional approaches on complex syntactic structures.
 ➢ **Language Model Development:** Build and optimize custom parsing models using complex grammatical formalisms (CFGs, dependency grammars) that extract structured information from unstructured text with high precision.
 ➢ **Prompting Systems:** Develop sophisticated natural language prompting templates that enhance LLM performance on specialized linguistic tasks, demonstrating bias toward practical implementation over theoretical perfectionism.
 ➢ **Cross-functional Collaboration:** Regularly partner in strategic product & GTM initiatives to translate NLP insights into practical featurization for PMF, effectively communicating technical concepts to both clients & non-technical stakeholders.
 ➢ **Daily AI Integration:** Actively incorporate LLMs and AI tools to creatively accelerate development workflow.
 ➢ **Technical Documentation:** Write and maintain comprehensive documentation for dev tools, grammatical systems, and parsing pipelines, enabling creative longevity, broader team adoption, and continuous improvement of NLP capabilities.

Speechmatics USA • Strategic Business Development • *February 2024–October 2024*

 ➢ **Business Development**: Consistently exceeded all Business Development KPIs, achieving 160% of lead conversion quota, generating 1M in pipeline revenue through strategic prospecting, exceptional outreach, technical demos, and brand evangelism.
 ➢ **Partnerships**: Fostered partnerships with unicorn logos from cold outreach and on-the-ground relationship-building.
 ➢ **Cross-functional**: Serve as the representative Business Development liaison for the cross-functional Product team involved in strategically increasing usage and demand for specific non-English Language initiatives and maximizing the effectiveness of individual model uplifts and landings. Served as the representative Business Development liaison between Product Marketing and Finance to develop internal Competitive Intelligence and drive GTM outreach initiatives based on expert market analysis.
 ➢ **RevOps & Marketing**: Drove improvements to marketing & revenue operations, streamlining the efficacy of MQLs by highlighting inefficiencies in the data collection of web portal user input, and writing technically engaging public-facing copy.
 ➢ **Technical Hunger**: Regularly self-educated and interfaced with Product blogs, developer resources, and Sales Engineers.

UCLA Department of Linguistics • Graduate Ph.D Research Scientist • *2019–September 2023*

 ➢ **Research vision**: Owned an individual research agenda deploying the latest in theoretical linguistics across 6 languages.

 ➢ **Financial success**: Exceeded all KPIs in negotiating >200% of competitive funding quota for individual and team projects.

 ➢ **Language Model Design & Development**: Hands-on computational linguistic R&D experience developing FSGs,

weighted CFGs, and other non-ANN models across all domains of natural language in Haskell and Python.

➢ **Data Collection**: Designed and oversaw elicitation sessions extracting 300+ hours of language data from 12 participants.

➢ **Data annotation:** Hands-on experience with data annotation (Praat) and analysis to aid in the development of theoretical phonological, syntactic, semantic, and pragmatic models of natural language and communication.

➢ **Statistical**: Hands-on experience performing statistical analyses of experimental data for linguistic research using R.

➢ **Innovation & knowledge sharing**: Regularly collaborated to produce novel discoveries in natural language science.

➢ **Presentation & publication**: Contributed to team success authoring 13 conference presentations, publishing 9 papers.

➢ **Global representation**: Traveled to 5 countries in Europe/Asia delivering technical presentations on behalf of the team.

➢ **Industry event organization**: Led conferences with 300+ attendees, multitasking speaker selection, website design, social media, and team management, building and maintaining strong relationships across international universities.

➢ **Technology adoption**: Stayed abreast of the latest developments in technological trends, producing research summaries for departmental strategic planning, sharing knowledge, and driving innovation independently and as a key team player.

Harvard Journal of East Asian Linguistics (JEAL) • Invited Reviewer • *2022-2023*

➢ **Expert authority**: Invited to perform peer review of journal submissions in the areas of Chinese theoretical syntax.

USC North American Summer School in Language, Logic, and Information • Career Mentor • *2022*

➢ **Dedicated mentorship**: Invited to consult, providing valuable one-on-one guidance, expert career training, and mentorship services, nurturing the educational ambitions of aspiring undergraduate researchers in the natural language sciences.

UCLA Department of Linguistics • Primary Instructor and Teaching Assistant • *2020-2022*

➢ **Exceptional student success**: Achieved a 98% pass rate as the primary instructor for UCLA's undergraduate linguistics.
➢ **Engaging curriculum**: Designed and delivered comprehensive coursework for over 750 students, fostering excellency.
➢ **Effective leadership**: Navigated academic logistics by bridging communication between admin, faculty, and students.
➢ **Team management**: Led a team of assistants, ensuring their support and effective contribution to the learning process.

Education
➢ M.A., Generative Linguistics, 2023. University of California, Los Angeles (UCLA) Department of Linguistics.
● Ph.D coursework in mathematics, computer science, cognitive science, psychology, formal logic, and NLP.
➢ M.A., Theoretical Linguistics, 2019. Institute of Linguistics, National Tsing Hua University (NTHU).
➢ B.A., Cognitive Science and Mandarin Chinese, 2016. Marlboro College. Graduated with Highest Honors.

Proficiencies & Technical Experience
➢ *Programming & Version Control:* Python, Haskell, Lisp, Go, fish, zsh, Bash, Git, Docker, JavaScript, R, LaTeX

➢ *NLP Tools:* Stanza, spaCy, NLTK, Praat, ELAN, Jupyter

➢ *AI Integration:* LLM APIs (OpenAI, Anthropic), Cursor AI (VS Code), emacs + aidermacs

➢ *Data:* Linguistic Corpus Development, Data Annotation, Statistical Analysis, Experimental Research Design

➢ *Business Intelligence:* Technical Demo Design, CRM (Salesforce), Product Positioning, GTM Strategy

➢ *Languages:* Polish (fluent, heritage), Mandarin (fluent)

➢ *Soft:* Cross-functional Collaboration, Technical Documentation, Research Planning, Technical Presentations

Matthew N. Czuba

University of California, Los Angeles
Department of Linguistics
3125 Campbell Hall
Los Angeles, C.A. 90095-1543

czuba@ucla.edu
www.mnczuba.com
Citizenship: United States
Interests: syntax, semantics, pragmatics

EDUCATION

University of California, Los Angeles
Ph.D., Linguistics (F19—)
M.A., Linguistics, 2021.

Institute of Linguistics, National Tsing Hua University
M.A., Linguistics, 2019.

- *Thesis Title:* '*This-Can't-Be* Epistemic Modality!'
- *Committee:* W.-T. Dylan Tsai, Chen-Sheng Luther Liu, I-ta Chris Hsieh

Marlboro College
B.A., Linguistics and Mandarin Chinese, 2016.
- *Thesis Title:* 'Pertaining to Mandarin Chinese Complex Directional Constructions.'
- *Committee:* C.-T. James Huang, Xiaoguang Grant Li, Seth Harter

OTHER EDUCATION

The 4th Crete Summer School of Linguistics. University of Crete, Rethymnon, Greece, 2022.
North American Summer School in Language, Logic, and Information (NASSLLI), USC, 2022.
The 2nd Crete Summer School of Linguistics. University of Crete, Rethymnon, Greece, 2018.
The Crete Summer School of Linguistics. University of Crete, Gallos, Rethymnon, Greece, 2017.
Linguistic Society of America Annual Meeting Workshop in Experimental Syntax, 2016.
Linguistic Society of America Summer Institute. University of Chicago, 2015.
Sixth Heritage Language Summer Institute, NHLRC. Harvard, 2015.
Linguistic Society of America Annual Meeting Workshop in Praat, 2015.

PUBLICATIONS

2022 *in press* 'Past and Future Temporality in Dschang.' To appear in *Proceedings of the 10th World Congress of African Linguistics (WOCAL-10)*, Language Science Press.

CONFERENCE /
WORKSHOP
PRESENTATIONS

2022 (*collaboration with Colin Brown, Zhuo Chen, Blake Lehman, & Harold Torrence.*) 'Varieties of Polar Question Types in Dschang.' Talk presented at the 4th *Symposium on West African Languages (SyWAL2022)*. September 21, University of Naples.

2022 'A Preliminary Analysis of Dschang Clausal Structure: The View from Tense, Aspect and Negation.' Talk presented at the 53rd *Annual Conference on African Linguistics (ACAL 53)*. April 8, UCSD.

2022 (*with Colin Brown, Zhuo Chen, Blake Lehman, & Harold Torrence.*) 'The Inventory of Polar Question Types in Dschang.' Talk presented at the 53rd *Annual Conference on African Linguistics (ACAL 53)*. April 7, UCSD.

2022 'Towards a syntax-semantics of Tense, aspect, and negation in Dschang.' Talk presented at the 11th *Annual Meeting of the Illinois Language and Linguistics Society*. February 25-26, University of Illinois Urbana-Champaign.

2021 'Evidentiality Contrasts & TAM Marking in Bamiléké-Dschang.' Talk presented at the *Mirativity and Evidentiality in Bantu Workshop*, sponsored by *Bantu Syntax & Information Structure (BaSIS)*. October 7th, Leiden/Essex.

CONFERENCE / WORKSHOP PRESENTATIONS (*continued*)	2021	'Evidentiality Contrasts in the Verbal System of Dschang.' Talk presented at the *10th World Congress of African Linguistics (WOCAL-10)*. June 7-11, Leiden.
	2021	'Temporality and Aspectuality in Dschang.' Talk presented at the *52nd Annual Conference on African Linguistics (ACAL 51-52)*. April 8-10, University of Florida.
	2019	'Defending Epistemic Indefensibility: Enrichment and the Case of Quasi-Denial.' Talk presented at the *Workshop on Encoding Emotive Attitudes in Non-truth-conditional Meaning (Emo 2019)*, 41st Annual Conference of the German Linguistics Society (DGfS). March 6-7, University of Bremen, Germany.
	2018	'Quasi-Denial and Epistemic Bias at the Interfaces.' Talk presented presented at the *8th International Conference on Formal Linguistics (ICFL-8)*. November 23-25, Hangzhou, Zhejiang Province, China.
	2019	'In Defense of Epistemic Indefensibility.' Talk presented at the *20th Szklarska Poręba Workshop on the Roots of Pragmasemantics*. March 1-4, Szklarska Poręba, Poland.
	2018	'Quasi-Denial and Epistemic Bias at the Interfaces.' Talk presented presented at the *8th International Conference on Formal Linguistics (ICFL-8)*. November 23-25, Hangzhou, Zhejiang Province, China.
PRESENTATIONS (NON-REFEREED)	2022	On the Syntax-Semantics of Predicates of Personal Taste in Cantel K?iche?. Paper presented at the UCLA Miniconference on K'iche'..
	2018	'Tricky Biased Constructions: An Investigative Effort into Quasi-Denial.' Poster presented at the *2nd Crete Summer School of Linguistics, Rethymno, Greece*.
TEACHING EXPERIENCE	2022 (Summer)	Instructor, Introduction to Linguistics (LING-1), UCLA
	2021 (S21)	Teaching Assistant, Introduction to Linguistic Analysis (LING-20), UCLA
	2020 (W20)	Teaching Assistant, Introduction to Linguistics (LING-1), UCLA
	2020 (F20)	Teaching Assistant, Introduction to Linguistics (LING-1), UCLA
	2014 - 2016	Tutor, Mandarin Chinese, Marlboro College
	2015 (Fall)	Course Assistant, *Linguistics as Cognitive Science*, Marlboro College
RESEARCH EXPERIENCE	09/2017- 07/2019	Research Assistant, Institute of Linguistics, National Tsing Hua University. Project: A Comparative Syntactic Study of Weakly Tensed Languages Principle Investigator: Dr. Wei-tian Dylan Tsai
	03/2017- 08/2017	Research Assistant, Institute of Linguistics, National Tsing Hua University. Project: A Comparative Syntactic Study of Evidentiality and Illocutionary Force Principle Investigator: Dr. Wei-tian Dylan Tsai
	09/2016- 02/2017	Research Assistant, Psycholinguistics Laboratory, National Tsing Hua University. Project: Sentence Processing of English Relative Clauses by L1 Mandarin Speakers Principle Investigator: Dr. Chun-chieh Natalie Hsu
INVITED TALKS	2016 (Spring)	Talk Presented to the Marlboro College Board of Trustees *'Language and the Liberal Arts'*
	2016 (Spring)	Marlboro College Senior Plan Presentations *'Universal Grammar and the Structure of Directed Motion: What's Really Moving in Mandarin?'*

AWARDS AND SCHOLARSHIPS		
2022	Graduate Research Mentorship, UCLA ($20,000)
2021	Graduate Research Mentorship, UCLA ($20,000)
2016, 2017, 2018	International Graduate Student Scholarship, National Tsing Hua University
2016	The Roland W. Boyden Prize, Marlboro College
2014, 2015, 2016	Marlboro College Travel Scholarships ($3,100, three-year total)
2014, 2015, 2016	Eastman Charitable Foundation Award ($600, three-year total)
2015	Marlboro College Summer Scholarship ($2,400)
2014 (Spring)	Margaret A. Cargill Foundation Travel Award ($2,300)
	- Research Collaboration with the Cambodian Water Project of Massachusetts

PROFESSIONAL CERTIFICATIONS

TESOL Certificate. Granted by Marlboro College Graduate School, 2015.

PROFESSIONAL AFFILIATIONS	
2014 - present	Linguistic Society of America, Student Member
2018 - 2019	Linguistic Society of Taiwan, Student Member

ACADEMIC SERVICE	
2022 – present	Student Member, UCLA Linguistics Syntax Search Committee (Fall, Winter)
2022 – present	Reviewer, Journal of East Asian Linguistics (JEAL)
2022	Mentor, 13th NASSLLI Pop-Up Mentoring Program
2022 – present	Organizer, 13th California Universities Semantics & Pragmatics workshop @ UCLA
	- design/maintain website & social media for CUSP-13 and future CUSP workshops
2018 (Fall)	Organizer, SSWATH-1 (2019 Syntax-Semantics Workshop @ NTHU)
2016 – present	Proofreader, Language Science Press
2015 – present	Member, LSA Committee on Student Issues and Concerns (COSIAC)
2015 – 2016	Member, Marlboro College Curriculum Committee
2014 – 2016	Member, Marlboro College Language Committee
2014	Student Representative, Marlboro College Academic Search Committee
	- Position Sought: Visiting Professor of Mandarin Chinese Language

LANGUAGE COMPETENCIES

English (Native), Polish (Heritage), Mandarin Chinese (Upper-Intermediate, Research), Bamiléké-Dschang (Research), K'iche' (Research)

TECHNICAL PROFICIENCIES

bash (Proficient), Lisp (Limited), HTML, CSS, Haskell (limited), Python (limited), LATEX, Praat, ELAN (fieldwork proficiency)

REFERENCES

Available upon request.