

GARRET KURTEFF

Curriculum Vitae

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CURRENT POSITION

Third-year graduate student (MA/PhD program) at the University of Texas at Austin, department of Communication Sciences & Disorders

RESEARCH INTERESTS

- Computational auditory neuroscience, brain-to-text decoding, brain-computer interfaces
- Reorganization of language after brain trauma (stroke, neurosurgery)
- Function of canonical “Broca’s area”
- Electrophysiology (electrocorticography, electroencephalography) of speech
- Aphasia and acquired motor speech disorders (apraxia of speech)

EDUCATION

M.S./Ph.D. in Communication Sciences & Disorders

University of Texas at Austin

Aug. 2018 - Present

Austin, TX

- Mentor: Liberty Hamilton
- Research interests: see above

B.A. in Linguistics

University of California, Berkeley

Dec. 2015

Berkeley, CA

- Mentors: Lev Michael, Keith Johnson
- Research interests: acoustic and auditory phonetics, anthropological linguistics

B.A. in Psychology

University of California, Berkeley

Dec. 2015

Berkeley, CA

- Mentors: Joseph Campos, Silvia Bunge
- Research interests: sleep, functionalist perspectives on emotion, prenatal learning

PUBLICATIONS

- Ammanuel, S., Almeida, N.C., Kurteff, G., Kakaizada, S., Molinaro, A., Berger, M.S., Chang, E.F., & Hervey-Jumper, S.L. (in review). *Natural language assessment correlates with health-related quality of life in adult glioma patients*. *Journal of Neuro-Oncology*.
- Kurteff, G., Fox, N.P., Dronkers, N.F., Desai, M., Shafi, A., & Chang, E.F. (in prep). *Behavioral and neuroanatomical description of stimulation-induced speech arrest*.
- Chang, E.F., Kurteff, G., Andrews, J., Briggs, R.G., Conner, A.K., Battiste, J.D., & Sughrue, M.E. (2020). *Pure apraxia of speech after focal surgical resection of area 55b in dorsal premotor cortex*. *Neurosurgery*. doi:10.1093/neuros/nyaa002
- De Witte, E., Piai, V., Kurteff, G., Cai, R., Mariën, P., Dronkers, N., Chang, E.F., & Berger, M.S. (2018). *A valid alternative for in-person language assessments in brain tumor patients: Feasibility and validity measures of the new TeleLanguage test*. *Neuro-Oncology Practice*. doi:10.193/nop/np020

- Chang, E.F., Kurteff, G., & Wilson, S.M. (2018). *Selective interference with syntactic encoding during sentence production by direct electrocortical stimulation of the inferior frontal gyrus*. Journal of Cognitive Neuroscience. doi:10.1162/jocn.a.01215

SELECTED ABSTRACTS

- Kurteff, G., Martinez, A., Currens, N., Holder, J., Mercado, V., Truong, C., Huber, C., Pokharel, P., and Hamilton, L.S. (2020). *Methods for Investigating Continuous Speech Production and Perception with EEG*. Poster session presented at the Annual Meeting of the Society for Neurobiology of Language. Virtual Meeting due to COVID-19.
- Kurteff, G., Fox, N.P., Dronkers, N.F., Desai, M., Shafi, A., & Chang, E.F. (2019, March). *Behavioral and neuroanatomical description of stimulation-induced speech arrest*. Poster session presented at the Annual Meeting of the Cognitive Neuroscience Society, San Francisco, CA, USA.
- Chang, E.F., Kurteff, G., & Wilson, S.M. (2017, November). *Selective interference with syntactic encoding during sentence production by direct electrocortical stimulation of the inferior frontal gyrus*. Poster session presented at the Annual Meeting of the Society for the Neurobiology of Language, Baltimore, MD, USA.
- De Witte, E., Piai, V., Kurteff, G., Cai, R., Berger, M.S., Chang, E.F., & Dronkers, N. (2016, October). *Usability and validity of a phone battery to assess language functions in brain tumor patients undergoing awake surgery*. Poster session presented at the Annual Meeting of the Academy of Aphasia, Llandudno, Wales, UK and Society of Neurooncology, Scottsdale, AZ, USA.

RESEARCH EXPERIENCE

UT Austin Department of Communication Sciences & Disorders Aug. 2018 - Present
Graduate Research Assistant Austin, TX

- Principal Investigator: J. Liberty Hamilton
- Researching neural representation of language via electrocorticography (ECoG) and other electrophysiological methods (EEG, EMG)

UCSF Department of Neurological Surgery Aug. 2016 - Aug. 2018
Research Specialist San Francisco, CA

- Principal Investigator: Edward F. Chang
- Performed research on aphasia found in postoperative neurosurgical patients
- Collected data using various aphasia batteries, in addition to helping develop aphasia batteries
- Performed intraoperative awake language mapping

UC Berkeley Department of Linguistics Aug. 2015 - Dec. 2015
Undergraduate Researcher Berkeley, CA

- Principal Investigator: Sarah Bakst
- Aided graduate student Sarah Bakst with her dissertation on coarticulation and individual variation of coda /r/ and /l/
- Used Praat alongside knowledge of phonetics to align text grids with participant data
- Wrote a Python scripts to extract ultrasound images based on target phoneme's position

UC Berkeley Department of Linguistics Jan. 2015 - May 2015
Undergraduate Researcher Berkeley, CA

- Principal Investigator: Dr. Lev Michael
- Worked in Dr. Lev Michael's lab on documentation and morphological description of Matsigenka, an Arawakan language

- Collaborated with Dr. Lev Michael directly in novel glossing of semantically complex morphemes
- Used FLEx to write and maintain a digital corpus of Matsigenka

Golden Bear Sleep & Mood Research Clinic

Research Assistant & Morning Supervisor

Jul. 2014 - Aug. 2015

Berkeley, CA

- Principal Investigator: Dr. Allison Harvey
- Worked in Dr. Allison Harvey's lab, assessing early-morning wakefulness in teenagers with sleep disorders caused by late-night technology usage via cognitive-behavioral tasks
- Distributed flyers to recruit test subjects
- Morning Supervisor (November 2014 - August 2015): trained new research assistants to collect data and oversaw morning experiments

CLINICAL EXPERIENCE

All Care Therapies

Speech-Language Pathology Externship

Jun. 2020 - Aug. 2020

Georgetown, TX

- Supervisors: Holly Mouton, MS, CCC-SLP; Lynzy Melzer, MA, CCC-SLP
- Treated pediatric and adult clients in a private practice setting
- Treatment focused on early language, articulation and phonological disorders, and autism spectrum disorders

Round Rock ISD

Speech-Language Pathology Externship

Jan. 2020 - May 2020

Round Rock, TX

- Supervisors: Vanessa Baca, MA, CCC-SLP; Jeanette Fields, MA, CCC-SLP
- Student externship at Stony Point High School
- Delivered speech-language pathology services to special education students with autism spectrum disorders, cognitive deficits, and developmental disorders
- Services focused on social communication, receptive and expressive language through AAC, fluency, articulation, and joint attention

UT Austin

Graduate Student Clinician

Jan. 2019 - Present

Austin, TX

- Supervisors: Nickole Hines-Staples, MA, CCC-SLP, BIES; Jessica H. Franco, PhD, CCC-SLP, BCBA-D; Kristy Armer, M.S., CCC-SLP
- Hines-Staples rotation: Performed evaluation and treatment for children with expressive language, phonological, and articulation disorders at the UT Speech and Hearing Clinic (UTSHC)
- Franco rotation: Treated adults with Autism Spectrum Disorder and Down syndrome in a group setting as part of UTSHC's "Convo Club;" evaluated children with phonological disorders
- Armer rotation: Performed evaluation and treatment for varying adult populations, including Autism Spectrum Disorder and aphasia

UT Austin

Graduate Student (List of Relevant Coursework)

Aug. 2018 - Present

Austin, TX

- Developmental Language Disorders
- Anatomy & Physiology of the Auditory System
- Acquired Cognitive Communication Disorders
- Dysphagia
- Fluency Disorders (independent study with Dr. Courtney Byrd)

UCSF Department of Neurological Surgery

Aug. 2016 - Aug. 2018

*Assistant Specialist**San Francisco, CA*

- Performed aphasia evaluations using WAB, BNT, and QAB (Quick Aphasia Battery) in presurgical and postsurgical patients
- Worked with team of neurologists and neurosurgeons to intraoperatively map language in the brain using nonstandardized language assessments and electrocortical stimulation
- Collected data to help develop new aphasia assessments (QAB, TeleLanguage)

In-Home Supportive Services

Sep. 2013 - Jan. 2015

*Personal Care Attendant**Berkeley, CA*

- Provided assistance for a student with tetraplegia including homemaking, physical therapy, and hygienics

WORK EXPERIENCE

Rasputin Music

Sep. 2015 - May 2016

*Technical Support**Berkeley, CA*

- Provided hardware and software support for a chain of Bay Area record stores
- Installed and uninstalled technological infrastructure from multiple locations, including security cameras, stereo systems, and LAN file servers, etc
- Assisted with administrative duties such as bookkeeping and organization

UC Berkeley Department of Linguistics

May 2015 - Sep. 2015

*Web Designer**Berkeley, CA*

- Wrote HTML/CSS websites for Dr. Lev Michael and the UC Berkeley Linguistics department

UC Berkeley Department of Civil Engineering

Sep. 2014 - Sep. 2015

*Desktop Support Assistant**Berkeley, CA*

- Provided desktop support for an engineering research organization (California PATH), including software installation, software documentation, hardware maintenance, network configuration, etc
- Documented software developed by PATH on a Drupal website which I maintained and configured

TEACHING EXPERIENCE

UT Austin

Aug. 2019 - Present

*Teaching Assistant**Austin, TX*

- TA for "Language and the Brain," taught by Dr. Liberty Hamilton
- Guest lectures lead: "Introduction to EEG," "Cortical Stimulation Mapping"
- Semesters TAing: Fall 2019, Fall 2020

UC Berkeley DeCal Program

Sep. 2013 - Jan. 2015

*Student Instructor**Berkeley, CA*

- With three other student instructors, instructed a two unit course at UC Berkeley, "Intro to 3D Modeling" for three semesters
- Taught fundamentals of 3D modeling and 3D printing in Autodesk CAD software

ACADEMIC AND COMMUNITY SERVICE

brainWaves Podcast

July 2019 - Present

*Co-Host**Austin, TX*

- Co-host of "brainWaves" podcast with Maansi Desai, fellow graduate student at UT

- Podcast topics include auditory neuroscience, communication disorders, and how to effectively communicate science to the general public as a researcher
- Prominent researchers from the fields of auditory neuroscience and communication sciences and disorders are invited as guests onto the podcast to communicate their research in a fashion suitable for the general public

Yellow Bike Project

Volunteer Mechanic

Mar. 2019 - Present

Austin, TX

- Repairing donated bicycles for a local nonprofit bicycle cooperative

Society for Linguistics Undergraduate Students (SLUGS)

Member & President

Jan. 2014 - Dec. 2015

Berkeley, CA

- Discussed undergraduate and graduate research on campus
- Created community for Linguistics undergraduates at UC Berkeley
- Coordinated talks for the club from various guest speakers within the discipline of linguistics
- Served as club president from May 2015 to December 2015
- Returned as an alumnus to give presentations on my current research (April 2017)

3D Modeling Club (3DMC)

Founding Member

Mar. 2013 - Jan. 2015

Berkeley, CA

- Helped to create UC Berkeley's first 3D modeling and printing club
- Expanded club by hosting weekly meetings and starting a student-taught course through the university's "DeCal" program
- Secured funding for club-owned 3D printing equipment

FIRST Lego League

Mentor

Jan. 2012 - Apr. 2012

Carmel Valley, CA

- Mentored students at Carmel Middle School as part of an after-school robotics program

HONORS AND AWARDS

- UT Austin Moody Doctoral Fellowship, Fall 2019 - Spring 2022
- UT Austin Provost Fellowship, Fall 2018 & Summer 2019
- UC Berkeley Dean's Honors, Spring 2015 & Fall 2015

SKILLS

Programming languages

- Python, MATLAB, Swift, Bash/DOS

Markup languages

- HTML/CSS/KML, L^AT_EX

Software

- Mac OS X, GNU/Linux, Windows, Praat, Git, FLeX, Microsoft Office, Adobe Creative Suite, Autodesk Inventor & Fusion 360, 120 WPM typing speed

Languages

- Fluent proficiency: English

- Fair proficiency: French
- Elementary proficiency: Japanese, Norwegian (Bokmål), American Sign Language
- Creator: Kurajo, 5ELX (constructed languages)