Kelsie L. Lopez, A.B.

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EDUCATION

2020   **Brown University**, Providence, RI
A.B. with Honors in Psychology
GPA: 3.89
Honors Thesis: *Children's scalar implicature computation: How children learn that "some" means "not all," but "dax" doesn't*
Faculty Advisor: Roman Feiman, PhD

RESEARCH EXPERIENCE

2020 –   Northeastern University, Boston MA
Research Technician
Plasticity in Neurodevelopment Lab
Research mentor: Dr. Laurel Gabard-Durnam
- Serve as a member of a neuroimaging consortium funded by the Bill and Melinda Gates Foundation examining early brain biomarkers of health/at-risk development in global contexts of adversity
- Analyze existing developmental datasets with the goal of building and comparing predictive biomarker profiles of both risk and resilience related to contexts of psychosocial deprivation in Romania and urban poverty in Bangladesh
- Develop and optimize the next iterations of the Harvard Automated Processing Pipeline for EEG (HAPPE) software, extending compatibility to event-related potential designs for processing task data in the time domain (HAPPE+ER) and low-density EEG data (HAPPILEE)
- Prepare manuscripts for publication by compiling sources for literature reviews, outlining manuscript structure, creating tables and graphs, and taking the lead on writing

2018 – 2020   Brown University, Providence, RI
Undergraduate Student Thesis Researcher
Brown Language and Thought Lab
Research mentor: Dr. Roman Feiman
- Lead recruitment efforts and formed relationships with local preschools, daycares, elementary schools, camps, and children's museums across Rhode Island to contribute to the lab's subject database
- Developed and designed two-part research study with PI for senior thesis investigating children's understanding of scalar implicatures
- Ran senior thesis with a total of 200 children, averaging roughly ten participants per week between the ages of 3-7 both in-lab and at sites
- Managed all intellectual responsibilities associated with the final manuscript, such as conducting a literature review, coding analyses, creating graphs and visuals, and producing the final written product

2018 – 2018   Harvard University, Cambridge, MA
Research Assistant
The Harvard Music Lab
Research mentor: Dr. Samuel Mehr
- Facilitated studies for an average of eight to ten infants per week in-lab

- Analyzed videos obtained during study using the program Datavyu, coding for infant gaze and affect
- Recruited new subjects through email, phone, and social media while raising awareness of the lab in the local community
- Gathered data for collection of over 5,000 songs from 60 cultures around the globe in order to study the universality of music
- Contributed as co-author on paper published in *Nature Human Behavior*

2016 – 2018   Brown University, Providence, RI
Research Assistant
Metcalf Infant Research Lab
Research mentor: Dr. Jim Morgan
- Recruited subjects for longitudinal and one-time developmental linguistics studies, acting as a liaison between participants and the lab
- Maintained and organized database containing thousands of subjects for efficient storage of contact information
- Proctored studies one to two times per week with infant subjects by actively manipulating stimuli in real-time

TEACHING EXPERIENCE

2020 - 2020   **Learning and Conditioning**
Role: Undergraduate Teaching Assistant
Cognitive, Linguistic, and Psychological Sciences Department, Brown University
- Provided support for class of 150 students
- Mentored 21 students on application-based project throughout semester
- Prepared four review sessions and held weekly office hours to help students learn the course material
- Attended weekly meetings with the professor to coordinate assignments and evaluate exams/papers

2019 – 2019   **Social Psychology**
Role: Undergraduate Teaching Assistant
Cognitive, Linguistic, and Psychological Sciences Department, Brown University
- Provided support for class of 222 students
- Held office hours once a week to answer questions and explain course material one-on-one with students
- Graded and provided feedback for over 150 short response papers and 50 exams throughout the semester

HONORS AND AWARDS

2020   BrownConnect Collaborative SPRINT Award, Brown University
2020   The Muriel Fain Sher Memorial Premium in Psychology, Brown University
2020   Sigma Xi Honor Society
2019   Undergraduate Research and Teaching Award (UTRA), Brown University
2018   BrownConnect LINK Award, Brown University

PUBLICATIONS

2021

Lopez, K.L., Monachino, A.D., Vincent, K.M., Peck, F.C., Gabard-Durnam, L.J. (under review) Towards Good Scientific Practice for human electroencephalography studies.

Lopez, K.L., Monachino, A.D., Morales, S., Leach, S.C., Bowers, M.E., Gabard-Durnam, L.J. (under review) HAPPILEE: The Harvard Automated Processing Pipeline in Low Electrode Encephalography, a standardized software for low density EEG and ERP data.

Monachino, A.D., **Lopez, K.L.**, Pierce, L.J., Gabard-Durnam, L.J. (under review) The HAPPE plus Event-Related (HAPPE+ER) Software: a standardized processing pipeline for event-related potential analysis.

2020

Bainbridge, C.M., Bertolo, M., Youngers, J., Atwood, S., Yurdum, L., Simson, J., **Lopez, K.,** Xing, F., Martin, A., and Mehr, S.A. (2020). Infants relax in response to unfamiliar foreign lullabies. *Nature Human Behaviour*, 1-9.

OPEN-SOURCE SOFTWARE PACKAGES

HAPPILEE: The Harvard Automated Processing Pipeline in Low Electrode Encephalography (HAPPILEE)
Lopez, K.L., Monachino, A.D., Morales, S., Leach, S.C., Bowers, M.E., Gabard-Durnam, L.J.
GitHub Repository: https://github.com/PINE-Lab/HAPPE

The HAPPE plus Event-Related (HAPPE+ER) Software
Monachino, A.D., **Lopez, K.L.**, Pierce, L.J., Gabard-Durnam, L.J.
GitHub Repository: https://github.com/PINE-Lab/HAPPE

OPEN-SOURCE DATA

Lopez, K.L., Monachino, A.D., Morales, S., Leach, S.C, Bowers, M.E., Zeanah, C., Marshall, P., Fox, N., Nelson, C., Gabard-Durnam, L.J. (2021). Low Density EEG Files from Bucharest Early Intervention Project for HAPPILEE Software [Data set]. Zenodo. http://doi.org/10.5281/zenodo.5088346

Monachino, A.D., **Lopez, K.L.**, Underwood, E., Tao, A., Nelson, C., Berde, C., Cornelissen, L., Hensch, T., & Gabard-Durnam, L.J., (2021). Visual-Evoked Potential (VEP) Event-Related Files from the General Anesthesia and Brain Activity (GABA) Study (HAPPE 2.0) [Data set]. Zenodo. https://doi.org/10.5281/zenodo.5172962

SELECTED CONFERENCE PRESENTATIONS

Lopez, K.L., Underwood, E., Tao, A., Cornellisen, L., Nelson, C., Berde, C., Hensch, T., Gabard-Durnam, L.J. (2021, November). Auditory sensitive period timing and language development in infants with prior GABAergic drug exposure. Poster presented at the 54th Annual Meeting of the International Society for Developmental Psychobiology.

Monachino, A.D., **Lopez, K.L.,** Pierce, L.J., Gabard-Durnam, L.J. (2021, November). The HAPPE plus Event-Related (HAPPE+ER) Software: a standardized processing pipeline for event-related potential analysis. Poster presented at the 54th Annual Meeting of the International Society for Developmental Psychobiology.

Lopez, K. & Feiman, R. (2020, November). Some alternatives are worth considering: Children who compute scalar implicatures know that "some" means "not all," but "dax" doesn't. Poster presented at the 45th Annual Meeting of the Boston University Conference on Language Development. (virtual conference due to COVID-19)

Bainbridge, C.M., Youngers, J., Bertolo, M., Atwood, S., Yurdum, L., Lopez, K., Xing. F., Martin, A., & Mehr, S.A. (2020, August). Infants relax in response to unfamiliar foreign lullabies. Poster presented at the proceedings of the 42nd Annual Meeting of the Cognitive Science Society. (virtual conference due to COVID-19)

Bainbridge, C.M., Youngers, J., Bertolo, M., Atwood, S., Yurdum, L., Lopez, K., Xing. F., Martin, A., & Mehr, S.A. (2020, July). Cultural invariance in infant responses to world music. Poster presented at the biennial meeting of the International Congress of Infant Studies. (virtual conference due to COVID-19)

Lopez, K. (2019, August). How children learn that "some" means "not all," but "dax" doesn't. Summer Research Symposium. Brown Digital Repository. Brown University Library. https://doi.org/10.26300/qkgm8t67

Bainbridge, C.M., Atwood, S., Xing, F., Bertolo, M., Lopez, K., Bitran, A., Youngers, J., Mehr, S.A. (2019, March). Infant responses to foreign lullabies differ from responses to other foreign vocal music. Poster presented at the biennial meeting of the Society for Research in Child Development.

LEADERSHIP

2019 - 2020   **The Meiklejohn Program**
Role: Peer Advisor
Brown University
- Mentored five first-year students alongside a faculty advising partner throughout the academic year
- Advised students on course selection, study habits, housing, research opportunities, and social issues

2017 - 2019   **Psychology Departmental Undergraduate Group (DUG)**
Role: Leader
Brown University
- Planned and executed events (i.e., informational sessions, study breaks) and provided advice to over 150 undergraduate Psychology concentrators

2017 - 2019   **The Bruin Club – Campus Tour Guide**
Role: Mentor Tour Guide
Brown University
- Oversaw a group of tour guides and served as main resource for group members when questions and concerns arose

2016 - 2018   **WBRU Broadcasting**
Role: Music Director
Brown University
- Lead team of media curators to select music for on-air broadcasting by analyzing audience preferences in accordance with music availability
- Programed and oversaw daily music log for on-air and internet radio

SOCIETY MEMBERSHIP

2021   International Society for Developmental Psychobiology (ISDP)

TECHNICAL SKILLS

Programming Languages
- R
- MATLAB
- HTML
- CSS
- JavaScript
- Python

Applications/Programs
- R Studio
- MATLAB
- SPSS
- Datavyu
- SuperCoder
- Qualtrics
- MTurk
- Photoshop
- Illustrator
- Microsoft Office Suite