Wednesday Bushong

wbushong@ur.rochester.edu

RESEARCH INTERESTS language processing & production, information theory, cue integration, statistical learning, statistical methods in cognitive science

EDUCATION

Ph.D Candidate, Brain and Cognitive Sciences

2020 (expected)

University of Rochester

M.A. Brain and Cognitive Sciences

2018

University of Rochester

B.A. Linguistics, with Distinction

2015

B.S. Cognitive Science, specialization in Neuroscience, with Distinction

University of California, San Diego

Publications

Bushong, W. and Jaeger, T. F. (under review). Dynamic re-weighting of acoustic and contextual cues in spoken word recognition.

Bicknell, K., **Bushong**, W., Tanenhaus, M., and Jaeger, T. F. (in revision). Listeners can maintain and rationally update uncertainty about prior words.

Conference Proceedings **Bushong, W.** and Jaeger, T. F. (2019). Memory maintenance of gradient speech representations is mediated by their expected utility. In *Proceedings of the Forty-First Annual Conference of the Cognitive Science Society*.

Bushong, W. and Jaeger, T. F. (2019). Modeling long-distance cue integration in spoken word recognition. In *Proceedings of NAACL 2019 Cognitive Modeling and Computational Linguistics Workshop.*

Bushong, W., and Jaeger, T. F. (2017). Maintenance of perceptual information in speech perception. In *Proceedings of the Thirty-Ninth Annual Conference of the Cognitive Science Society*.

Conference Presentations **Bushong, W.** and Jaeger, T. F. (2018, September). Modeling long-distance cue integration in spoken word recognition. Poster presented at the Forty-First Annual Conference of the Cognitive Science Society, Montreal, Canada. *Also presented at CMCL 2019 (see Conference Proceedings)

Bushong, W. and Jaeger, T. F. (2018, September). Expected utility of later context mediates maintenance of subcategorical information. Poster presented at the 24th Annual Conference on Architectures and Mechanisms for Language Processing (AMLaP), Berlin, Germany. *Also presented at CogSci 2019 (see Conference Proceedings)

Bushong, W. and Jaeger, T. F. (2018, September). Cue reliability and adaptive re-weighting in spoken word recognition. Poster presented at the 24th Annual Conference on Architectures and Mechanisms for Language Processing (AMLaP), Berlin, Germany. *Also presented at CUNY 2018

Bushong, W., Burchill, Z., and Jaeger, T. F. (2018, September). *Understanding changes in garden-paths as expectation adaptation*. Poster presented at the 24th Annual Conference on Architectures and Mechanisms for Language Processing (AMLaP), Berlin, Germany.

Burchill, Z., **Bushong, W.** and Jaeger, T. F. (2018, September). Wasted power and false interactions in reading time analyses. Poster presented at the 24th Annual Conference on Architectures and Mechanisms for Language Processing (AMLaP), Berlin, Germany.

Bushong, W. and Jaeger, T. F. (2018, March). Cue reliability and re-weighting in speech perception. Poster presented at the 31st Annual CUNY Conference on Human Sentence Processing, Davis, CA.

Bushong, W., and Jaeger, T. F. (2017, March). Expectation adaptation to high-level linguistic constraints on word order. Talk presented at the 30th Annual CUNY Conference on Human Sentence Processing, Cambridge, MA.

Bushong, W., Bicknell, K., and Jaeger, T. F. (2017, March). Listeners maintain uncertainty about linguistic input. Poster presented at the 30th Annual CUNY Conference on Human Sentence Processing, Cambridge, MA. *Also presented at CogSci 2017 (see Conference Proceedings)

Bushong, W. and Jaeger, T. F. (2016, October). Processing the relative ordering of definite and indefinite noun phrases. Poster presented at the Dimensions of D Workshop, Rochester, NY.

Bushong, W., Morgan, E., Yen, M., and Levy, R. (2015, September). Compositional and holistic representations in multiword expressions. Poster presented at the 21st Annual Conference on Architectures and Mechanisms for Language Processing (AMLaP), Valletta, Malta.

Bushong, W., Ürgen, B. A., Miller, L. E., and Saygin, A. P. (2015, May). Influence of form and motion on biological motion prediction. Poster presented at Vision Sciences Society 15th Annual Meeting, St. Pete, Florida.

Invited Presentations

Bushong, W., Burchill, Z., and Jaeger, T. F. (2018, September). Learning to expect the unexpected: adaptation to new distributions of grammatical structures. Poster presented at NSF NRT PI Meeting, Washington, D.C.

Bushong, W. (2017, September). Maintenance of perceptual information in speech perception. Talk presented at University of Rochester NRT Mini-Conference, Rochester, NY.

Theses

Bushong, W. (2015). Compositional and holistic processing in novel and attested multiword expressions. Undergraduate Honors Thesis, Department of Linguistics, UC San Diego. (advisor: Roger Levy)

Bushong, W. (2015). Influence of form and motion on biological motion prediction. Undergraduate Honors Thesis, Department of Cognitive Science, UC San Diego. (committee: Ayşe Saygin, Seana Coulson, Burcu Urgen)

Teaching

At University of Rochester

Instructor, CSP 502: Cognitive Foundations of Behavior Aug 2019 Co-Instructor, BCS 152: Language & Psycholinguistics Aug 2018 - Dec 2018 Teaching Assistant, BCS 152: Language & Psycholinguistics Aug 2017 - Dec 2017 Jan 2017 - May 2017 Teaching Assistant, CSP 519: Data Analysis II: General Linear Models Teaching Assistant, BCS 111: Foundations of Cognitive Science Aug 2016 – Dec 2016 At UC San Diego Instructional Assistant, COGS 14A: Introduction to Research Methods Sep 2013 - Dec 2013

Awards

FELLOWSHIPS AND Donald M. and Janet C. Barnard Fellowship, University of Rochester 2018 - 2019Edward Peck Curtis Award for Excellence in Graduate Teaching, University of Rochester 2018 NSF National Research Training (NRT) Fellowship, University of Rochester 2016 - 2018NSF Graduate Research Fellowship Honorable Mention 2015 Provost Fellowship, University of Rochester 2015 - 2017Outstanding Graduate in Linguistics, UC San Diego 2015 2011 - 2015Chancellor's Scholarship, UC San Diego

Academic

At University of Rochester

SERVICE Graduate Representative, Graduate Admissions Committee

Fall 2018 – Spring 2019 Graduate Representative, Title IX Education Assessment Committee Fall 2018 - Spring 2019 REVIEWING Memory & Cognition (2019)

Cognitive Science (2018)

The Annual Meeting of the Cognitive Science Society (2017 – 2019)

Research Undergraduates at University of Rochester

Mentoring 2018: Nicole Vieyto 2017: Bethany Gardner EXPERIENCE

> 2016 – 2017: Evan Hamaguchi 2015 – 2016: Christopher Langfield

Clubs & At University of Rochester

Organizations Diversity Officer, Graduate Student Association Jun 2019 - May 2020 Jun 2016 - May 2018

IT Officer, Graduate Student Association

At UC San Diego

Jun 2014 - Jun 2015 Vice President, Cognitive Science Student Association Reviewer, Impulse Undergraduate Neuroscience Journal Nov 2013 - Jun 2015 Dec 2013 - Jun 2014 Professional Chair, Cognitive Science Student Association Jun 2013 - Jun 2015

President, Linguistics Undergraduate Association

Programming

SKILLS

R, Python, MATLAB/Octave