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Qihong Lu

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Education

2017-present **Ph.D.**, Psychology, Princeton University.
Advisor: Ken Norman, Uri Hasson

2013-2017 **B.S.**, Psychology & Mathematics, University of Wisconsin-Madison.
Comprehensive Honors; Certificate in Computer Science
Advisor: Tim Rogers

Undergraduate Research Experience

2014-2017 **Knowledge and Concepts Lab**, UW-Madison.
P.I.: Tim Rogers

Summer 2015 & 2016 **The Parallel Distributed Processing Lab**, Stanford University.
P.I.: Jay McClelland

2015 **Lupyan Lab**, UW-Madison.
P.I.: Gary Lupyan

2013-2015 **Language and Cognitive Neuroscience Lab**, UW-Madison.
P.I.: Maryellen MacDonald & Mark Seidenberg

Summer 2013 **Laboratory of Neural Coding**, Shanghai Key Lab of Brain Functional Genomics.
P.I.: Longnian Lin

Extracurricular Activities

2014-2017 **Student Representative**, Faculty Honors Committee, UW-Madison.
- Discussing and revising academic policies and curriculum for the Honors program.
- Reviewing scholarship and research grant applications.

2013-2014 **Tutor**, Greater University Tutoring Service, UW-Madison.
- Taught Calculus I/II and Introductory Biology.

Honors & Awards

2017 **College of Letters & Science Dean's Prize**, UW-Madison.

2017 **Undergraduate Academic Achievement Award**, UW-Madison.

2017 **Outstanding Undergraduate Research Scholar Award**, UW-Madison.

2016 **David H. Durra Scholarship**, UW-Madison.
High achieving student in physical sciences or mathematics.

2016 **Undergraduate Travel Awards**, UW-Madison.

2015 **Phi Beta Kappa as a junior**, UW-Madison.

2015 **Hilldale Undergraduate Research Fellowship**, UW-Madison.

2015 **Bromley Research Conference Travel Grant**, UW-Madison.

2015 **CSLI Summer Research Internship**, Stanford.

2014, 2015 **Undergraduate Research Scholar Award**, UW-Madison.
Nominated by Dr.Maryellen MacDonald & Dr.Timothy Rogers

2014 **International Undergraduate Writing Contest 3rd Place**, UW-Madison.

2014 **Margaret E. and Allard Smith Scholarship**, UW-Madison.

2014 **Welton Summer Sophomore Research Grant**, UW-Madison.

Papers

Lu, Q., Cox, C., Rogers, T. T., Lambon Ralph, M., & Takahashi R. (manuscript in preparation). An interactive account for human vision: a recurrent neural network explains neural and behavioral temporal dynamics of object recognition processes.

McClelland, J. L., Mickey, K., Hansen, S., Yuan, X., & **Lu, Q.** (manuscript in preparation). A Parallel-Distributed Processing Approach to Mathematical Cognition.

Wang, T., **Lu, Q.** & Seidenberg, M.S. (submitted). The role of transitional probability in reading Chinese.

Posters

Lu, Q., & Rogers, T. T. (2016). An interactive model accounts for both ultra-rapid superordinate classification and basic-level advantage in object recognition. Poster presented at the 38th Annual Meeting of the Cognitive Science Society, Philadelphia, PA.

Lu, Q., & McClelland, J.L. (2016). Teaching a neural network to count: reinforcement learning with "social scaffolding". Poster presented at the 15th Neural Computation and Psychology Workshop, Philadelphia, PA.

Cox, C. R., **Lu, Q.**, & Rogers, T. T. (2015). Iterative Lasso: An even-handed approach to whole brain multivariate pattern analysis. Poster presented at the 22nd Cognitive Neuroscience Society annual conference, San Francisco, CA.

Cox, C. R., **Lu, Q.**, & Rogers, T. T. (2015). Iterative Lasso: An even-handed approach to whole brain multivariate pattern analysis. Poster presented at the Neuroimaging, Computational Neuroscience and Neuroengineering Workshop, Madison, WI.

Talks

Lu, Q., & Rogers, T. T. (2016). A recurrent neural network for object recognition. Talk delivered at UW-Madison Senior Honors Thesis Symposium, Madison, WI.

Lu, Q., & McClelland, J.L. (2015). Teaching a PDP model to count. Talk delivered at Stanford Center of Study of Language and Information Summer Research Program Final Presentation, Stanford, CA.

Technical Skills

Matlab, Python, R, Java, GitHub, LENS, LaTeX

Undergraduate Mentoring

2016 Molly Ryan, UW-Madison. Assessing the localization of motion representation in the brain

Professional Affiliations

Society for Neuroscience
Cognitive Science Society
Cognitive Neuroscience Society
ReScience, ad hoc review

Workshops Attended

2017 **Mixed Model Workshop**, Princeton.
2017 **Data Carpentry Workshop**, UW-Madison.
2016 **Contemporary Deep Neural Network Models**, the 38th CogSci workshop.
2015 **Quantum Models of Cognition and Decision**, the 37th CogSci workshop.
2014 **Growth Curve Analysis of Longitudinal Data**, UW-Madison.

Online Course Certificates

2017 **Structuring Machine Learning Projects**, deeplearning.ai.
2017 **Hyperparameter tuning, Regularization and Optimization**, deeplearning.ai.
2017 **Neural Networks and Deep Learning**, deeplearning.ai.
2017 **Principles of fMRI 1**, *Coursera*, Johns Hopkins & Colorado Boulder.
2016 **Statistical Learning**, Stanford Online.
2016 **Build a Computer from 1st Principles**, *Coursera*, Hebrew University of Jerusalem.
2015 **The Brain and Space**, *Coursera*, Duke University.
2014 **Machine Learning**, *Coursera*, Stanford University.
2014 **Fundamentals of Neuroscience I**, *edX*, Harvard University.
2014 **Introduction to Dynamical System and Chaos**, Santa Fe Institute.
2014 **Introduction to Complexity**, Santa Fe Institute.
2014 **Moralities of Everyday Life**, *Coursera*, Yale University.
2014 **Statistical Analysis of fMRI Data**, *Coursera*, Johns Hopkins University.
2014 **Justice**, *edX*, Harvard University.
2014 **Intro to Computer Science & Programming Using Python**, *Coursera*, MIT.
2013 **Behavioral Economics in Action**, *edX*, University of Toronto.
2013 **Model Thinking**, *Coursera*, University of Michigan.

(Certificates available upon request)