# Qihong Lu

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University of Wisconsin-Madison, Madison, WI, U.S.A.

Jan. 2013 ~ May. 2017

- B.S. Psychology & Mathematics & Computer Science (Minor)
- Comprehensive Honors

## RESEARCH EXPERIENCE

Research Intern	Laboratory of Neural Coding	Summer 2013	
P.I.: Dr. Longnian I			
Research Assistant	Language and Cognitive Neuroscience Lab	$2013 \sim 2015$	
P.I.: Dr. Maryellen			
Research Assistant	Knowledge and Concepts Lab	2014 ~	
P.I.: Dr. Timothy Rogers, UW-Madison			
Visiting Researcher	The Parallel Distributed Processing Lab	Summer 2015 & 2016	
P.I.: Dr. James McC	Clelland, Stanford University		

#### EXTRACURRICULAR ACTIVITIES

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Tutor	Greater University Tutoring Service	2013 ~ 2014		
- Taught Calculus I/II and Introductory Biology.				
Social Science Chair	IV·Ω Academic Society	$2013\sim2015$		
- Organized "mini-lectures" and presented recent advances in social science on the "idea circle".				
<b>Student Representative</b>	Letter & Science Faculty Honors Committee	2014 ~		

- Discussing academic policies and curriculum.
- Reviewing applications for undergraduate research grant, study aboard scholarship and leadership trust award.

## **HONORS & AWARDS**

Undergraduate Research Scholar Award, Psychology Department, UW-Madison	
- Nominated by Dr. Maryellen MacDonald & Dr. Timothy Rogers	
Inducted to Psi Chi, Psychology Department, UW-Madison	
International Undergraduate Writing Contest, 3 <sup>rd</sup> Place, Department of English, UW-Madison	
Welton Summer Sophomore Research Apprenticeship Grant, L&S Honors Program, UW-Madison	
Margaret and Allard Smith Scholarship, College of L&S, UW-Madison	
- High achieving second year student.	
Inducted to Phi Beta Kappa as a junior, UW-Madison	
Hilldale Undergraduate Research Fellowship, College of L&S, UW-Madison	
Bromley Research Conference Travel Grant, L&S Honors Program, UW-Madison	
Center of Study of Language and Information Summer Research Fellowship, Stanford University	
David H. Durra Scholarship, College of L&S, UW-Madison	
-High achieving student in mathematics or physical sciences.	
Undergraduate Travel Awards, Psychology Department, UW-Madison	

## **TECHNICAL SKILLS:**

Significant experience: Matlab, Java (Eclipse), GitHub (https://github.com/QihongL)

Basic: R, Python, Linux & Unix, LENS, SPSS, Latex

### **PUBLICATIONS:**

- McClelland, J.L., Mickey, K., Hansen S., & Lu, Q. (submitted). A Parallel-Distributed Processing approach to mathematical cognition.
- **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 process.

#### **POSTERS:**

- 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 22<sup>nd</sup> *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.
- Lu, Q., & Rogers, T. T. (2016). An interactive model accounts for both ultra-rapid superordinate classification and basic-level advantage in object recognition. Poster to be 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 to be presented at *the 15th Neural Computation and Psychology Workshop*, Philadelphia, PA.

### TALKS:

- Lu, Q., & Rogers, T. T. (2015). Modeling the temporal dynamics of human categorization behavior. Talk delivered at *UW-Madison Undergraduate Research 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.
- Lu, Q., & Rogers, T. T. (2016). A recurrent neural network for object recognition. Talk delivered at UW-Madison Senior Honors Thesis Symposium, Madison, WI.

## **SELECTED COURSE PROJECTS:**

**Iterative reweighted lasso and its application to neuroimaging data**, ECE 532 Theory of Applications of Pattern Recognition, supervised by Dr. Robert D. Nowak

Within category visual coherence of a concept determine its top-down effect, PSYCH 411 Language and Thoughts, supervised by Dr. Gary Lupyan

### PROFESSIONAL AFFILIATION:

Cognitive Neuroscience Society	2014 ~
Cognitive Science Society	2015 ~
ONLINE COURSE CERTIFICATES:	
Model Thinking, Coursera, University of Michigan	Sep. 2013
Behavioral Economics in Action, edX, University of Toronto	Dec. 2013
Fundamentals of Neuroscience I, edX, Harvard University	Feb. 2014

Introduction to Dynamical System and Chaos, Santa Fe Institute	
Moralities of Everyday Life, Coursera, Yale University	
Statistical Analysis of fMRI Data, Coursera, Johns Hopkins University	Apr. 2014
Introduction to Complexity, Santa Fe Institute	May 2014
Justice, edX, Harvard University	Jul. 2014
Machine Learning, Coursera, Stanford University	Aug. 2014
Introduction to Computer Science and Programming Using Python, Coursera, MIT	
The Brain and Space, Coursera, Duke University	Jul. 2015
Statistical Learning, Stanford Online, Stanford University	Apr. 2016
Build a Modern Computer from First Principles, Coursera, The Hebrew University of Jerusalem	
Certificates available upon requ	