# Hsiang-Yun Sherry Chien

235 S Macon St, Baltimore, MD, 21224
+1-443-467-2215
sherry.chien@jhu.edu


## EDUCATION

***Johns Hopkins University*** *Baltimore, MD* 08. 2016 - 08. 2021 (Expected)
**Ph.D.** in Psychological and Brain Sciences

***Johns Hopkins University*** *Baltimore, MD* 08. 2016 - 05. 2018
**M.A.** in Psychological and Brain Sciences

***National Taiwan University*** *Taipei, Taiwan* 09. 2009 - 06. 2013
**B.A.** in Electrical Engineering & Neurobiology and Cognitive Science program

## RESEARCH EXPERIENCE

**PhD Candidate in Computational Cognitive Neuroscience** *Baltimore, MD* 08. 2016 - present

- Combining computational modeling and empirical analysis on fMRI data to investigate (1) constructing and forgetting temporal context in human cerebral cortex when processing narratives, and (2) what computational mechanisms implemented in neural network sequence model could give rise to the phenomena observed in (1)
- Developing biologically inspired language models and comparing its architecture and performance to existing LMs

**Full-time Research Assistant in Clinical Neuroscience** *Taipei, Taiwan* 07. 2013 - 06. 2016

- Investigating abnormal functional and structural connectivity of large-scale brain network and their impact on abnormal social and memory functions in children and adolescents with autism

**Cognitive and Computational Neuroscience Summer School** *NYUShangHai, China* 07 - 08. 2017

- Project: Implementing deep temporal auto-encoder model for learning sequences using Keras, examining the model representation and performance through modifying bottleneck layers

**Methods in Neuroscience Computational Summer School** *Dartmouth College, NH* 08. 2017

- Project: Examining the changes of time-varying functional connectivity corresponding to the event boundaries when people are watching a movie

## SKILLS

- **Programming languages & libraries**: Python, Pytorch, Numpy, Scipy, Matlab, Javascript, C++
- **Computational modeling experience**: Recurrent neural network, Language models, Deep neural network

## PUBLICATIONS & PRESENTATIONS

- **Chien HYS** and Honey C J (in press) Constructing and Forgetting Temporal Context in the Human Cerebral Cortex, ***Neuron*** *doi.org/10.1016/j.neuron.2020.02.013*
- **Chien HYS** and Honey C J (2018) Modeling the effects of temporal context on neural responses across the cortical hierarchy, ***2018 Conference on Cognitive Computational Neuroscience, poster presentation***
- Himberger KD, **Chien HY**, and Honey CJ (2018). Principles of Temporal Processing Across the Cortical Hierarchy, ***Neuroscience 389: 161-174***
- **Chien HY,** Lin HY, Lai MC, Gau SSF, and Tseng WYI (2015) Hyperconnectivity of the right posterior temporo-parietal junction predicts social difficulties in boys with autism spectrum disorder, ***Autism Research 8(4):427-41***
- **Chien HY,** Gau SSF, Hsu YC, Chen YJ, Lo YC, Shih YC, and Tseng WYI (2015) Altered cortical thickness and tract integrity of the mirror neuron system and associated social communication in autism spectrum disorder, ***Autism Research 8(6):694-70***
- **Chien HY,** Gau SSF, Tseng WYI (2016) Deficient visuospatial working memory functions and neural correlates of the default-mode network in adolescents with autism spectrum disorder, ***Autism Research 9(10):1058-1072***

## AWARDS

- 2017-2018 Taiwan Government Scholarship for Studying Abroad
- 2018 Conference on Cognitive Computational Neuroscience Student Travel Award
- 2020 G. Stanley Hall Scholar's Award for graduate student demonstrated exceptional scholarly progress in dissertation research