SOPHIE(XING) SU

Google Scholar
605 Leland Avenue Saint Louis, MO, 63130
(607-379-4627) ⋄ s.sophie@wustl.edu

EDUCATION

Washington University in Saint Louis *Aug 2021 - present*
Ph.D. in Psychology GPA:4.00
Advisor: Dr.Jeff Zacks

Cornell University *July 2017 - May 2019*
Bachelor of Arts in Psychology and Economics GPA:3.799
cum laude in Psychology, Distinction in all subjects

China University of Political Science and Law *September 2015 - June 2017**
Majored in Applied Psychology GPA 4.03, Top 10% of the class
*Transferred to Cornell University after sophomore year

RELEVANT COURSEWORK & CERTIFICATIONS

• **Certifications**: Interactive Track and the Course Project at the Inaugural Neuromatch Academy, Neural Networks & Deep Learning(Coursera), Machine Learning(Coursera), Principles of fMRI(Coursera)

• **Selected Courseworks**:Linear Algebra, Probability Models, Social Neuroscience, Biopsychology Laboratory, Applied Econometrics, Behavior Public Policy, Economics and Law, Intermediate Macroeconomics Theory, Intermediate Microeconomics Theory

SKILLS

• Programming languages: R, Python,Bash, MATLAB, HTML

• Softwares: SPSS, Excel, Freesurfer, AFNI, FSL, REDCap, FileMaker, Qualtrics

• Languages: Chinese (native), English (near-native)

PUBLICATION

• **Su,X.**& Swallow,K. In preparation. The role of perspective in action and goal Perception.

• Koirala, N., Perdue, M. V., **Su,X.**, Grigorenko, E. L., Landi, N. (2021). Neurite density and arborization is associated with reading skill and phonological processing in children. NeuroImage, 241, 118426.

• Koirala, N., Kleinman, D., Perdue, M. V., **Su,X.**, Villa, M., Grigorenko, E. L., Landi, N. (2021). Widespread effects of dMRI data quality on diffusion measures in children. Human brain mapping.

• Perdue, M., **Su,X.**, Koirala, N., Agrawal, V.& Landi, N. (2020, September). Relationships Between Gray Matter Structure and Reading Ability in a Large, Diverse Sample: Testing Age- and Sex-specific Effects (Abstract ID: 131616). Poster presented at the 2020 Flux Virtual Congress.

• Koirala,N., Perdue,M., **Su,X.**, Grigorenko,E.& Landi,N. (2019,November). Quantifying Imaging Quality for Multi-Center Data Analysis. Poster presented at the 2019 Florida Learning Disabilities Conference. Tallahassee, FL.

RESEARCH EXPERIENCE

Dynamic Cognition Laboratory August 2021 - present
PhD Researcher *Principal Investigator:* **Dr.Jeff Zacks**

- Model prediction in visual dynamic cognition by integrating state of the art static and dynamic saliency prediction models and real people gaze patterns
- Investigate the role of context in event perception by stimulating prediction using the extended structured event memory model in various contexts
- Exploring prediction error in saccades

Haskins Laboratories August 2019 - July 2020
Research Associate *Principal Investigator:* **Dr.Nicole Landi**

- Design the research plan; select, employ and assess various machine learning algorithms to identify anatomical features that are correlated to reading abilities
- Create and maintain a REDCap database of more than 2000 participants' behavior, genetics,and neuroimaging information using R and Bash script for the *Imaging Genetics in Specific Reading Disability (SRD): Meta- and Mega-analyses* project
- Work under Dr.Nabin Koirala to build an automated MRI imaging quality check pipeline by employing bash and Freesurfer scripts and building regression models using R
- Preprocess, clean, restructure and reformat neuroimaging data for future analysis using customized bash scripts on high performance computing linux clusters
- Reorganize, restructure and standardize behavior data of more than 2000's participants across different sites
- Organize weekly lab meeting of research ideas and progress

Attention, Memory & Perception lab at Cornell University Jan 2018- May 2019
Honors Thesis Student *Principle Investigator:* **Dr.Khena Swallow**

- Developed research question, study design, and experiment stimuli under the supervision of Dr.Khena Swallow
- Coded experiment stimuli using Matlab, administered the experiments to 120 Undergraduate students and analyzed the behavior data collected using R
- Presented this project at the 2019 Cornell Undergraduate Psychology Conference
- Coded event segmentation cues in experiment stimuli using Cowlog
- Participated in weekly lab meeting, presented research ideas and literature reviews

Child's Witness & Cognition Lab at Cornell University Jan 2018 - August 2018
Research Assistant *Principle Investigator:* **Dr.Stephen J. Ceci**

- Worked under Dr.Kayla Burd to compare different types of verdict procedures and the impact of requiring reasoned verdicts on the jury's decision making process
- Edited the mock case used in the experiment by counterbalancing various cognitive cues using Qualtrics
- Coded and analyzed mock jurors' qualitative data to determine the impact of jury verdict procedure on jurors' decision making and judgement

SNAP lab at Stanford University June 2018 - August 2018
Summer Research Assistant *Principle Investigator:* **Dr.Ian Gotlib**

- Analyzed fornix Diffusion tensor imaging data to explore the relationship of fornix development and early life stress using R
- Assisted with magnetic Resonance Imaging data acquisition, quality check and preprocessing using neuroimaging processing software such as Freesurfer and MrDiffusion
- Assisted Dr.Tiffany Ho with generating, editing fornix diffusion tensor imaging data of 200 adolescents

· Assisted Dr.Emily Dennis with identifying amygdala and hippocampus of 2-years old's magnetic Resonance Imaging structure imaging

Wang's lab at China University of Political Science and Law June 2016 - June 2017
Research Assistant *Principle Investigator:* **Dr.Guofang Wang**

· Conducted an independent study on the relationship between social media use and political polarization
· Developed the experiment using E-Prime, collected survey data from 400 participants using Qualtrics
· Analyzed the data using SPSS, co-wrote the project report