Ke (Coco) Zhao

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EDUCATION

University of Pennsylvania, Philadelphia, PA   *May 2022*
- Bachelor of Arts, Cognitive Science & Computer Science   GPA: 3.82/4.0

SKILLS

Programming	Proficient in Java, Python, HTML, CSS, JavaScript, and OCaml
	Project experience with MATLAB, PHP, MySQL, R, and C++
Software	Proficient in Microsoft Office Suite, Photoshop, and Adobe Flash
	Project experience with SPSS, Qualtrics, RedCap, and JMP
Languages	Fluent in Mandarin and English

RESEARCH EXPERIENCE

Research Assistant, Center for Neuromodulation in Depression and Stress, UPenn   *September 2019 – Present*
Research advisor: Dr. Yvette Sheline
- Conduct the real-time neurofeedback project that aims to treat depression by using fMRI.
- Work with other software engineers to build neural feedback machine learning model to access individual's real-time neural changes in function MRI. Check out www.brainiak.org for the product.
- Conduct data analysis by using RedCap and Python.

Research Assistant, Department of Neurology, UPenn   *June 2016 – Present*
Research adviser: Dr. Hengyi Rao
- Conducted an independent research project on the relationship between age, gender, and risk-taking behavior across lifespans. Part of the findings were presented at the 2018 annual Society for NeuroEconomics meeting.
- Built a series of web-based behavioral tasks by using HTML, CSS, and JavaScript to access individual's decision making, inhibitory, control ability, working memory, etc. Check out www.cogbraintest.com for the website product.
- Investigated the neural mechanisms underlying sensation-seeking and risk-taking behavior by using EEG and behavioral tasks.
- Conducted data analysis by using Microsoft Excel and SPSS. Conducted cognitive modeling by using R language.
- Engaged in several sleep studies and conducted data analysis and meta-analysis on sleep deprivation.

Research Assistant, IDEA Lab, University of Rochester   *January 2019 – May 2019*
Research adviser: Dr. Lisa R. Starr
- Conducted semi-structured clinical interviews to assess stressful experiences and stress responses in adolescents and young adults.
- Managed data by using Qualtrics.

VOLUNTEER EXPERIENCE

Mentor, Tech It Out Philly, Univeristy of Pennsylvania   *September 2019 – Present*
- Mentor high school students build a website using HTML, CSS, and Java Scripts in a 8-week program.

CONFERENCE PRESENTATION

- **Zhao, K**., Deng, Y., Fang, Z., & Rao, H. (2018). *Effects of Age and Gender on Risk-Taking Across the Life Span.* Poster presented at the Society for Neuroeconomics Annual Meeting, Philadelphia, PA.

PUBLICATIONS

- Wu, Q., Lei, H., Zhong, X., Jiang, Y., Deng, Y., **Zhao, K.,** Chai, Y., Yang, F., Wang, J., Detre, J.A., Rao, H. (under review). *Test-retest Reliability of Brain Small-world Network Properties from A Well-controlled Resting-state fMRI Study.*

- Lei, H., Huang, L., Li, J., Liu, W., Fan, J., Zhang, X., Xia, J., **Zhao, K.,** Zhu, X., & Rao, H. (2020). Altered spontaneous brain activity in obsessive-compulsive personality disorder. *Comprehensive psychiatry, 96*, 152144
- Xu, S., Luo, L., Xiao, Z., **Zhao, K**., Wang, H., Wang, C., & Rao, H. (2019). High sensation seeking is associated with behavioral and neural insensitivity to increased negative outcomes during decision-making under uncertainty. *Cognitive, Affective, & Behavioral Neuroscience*, *19*(6), 1352-1363.
- Yang, F., Xu, S., Spaeth, A., Galli, O., **Zhao, K.**, Fang, Z., Basner, M., Dinges, D.F., Detre, J.A., & Rao, H. (2019). Test-Retest Reliability of Cerebral Blood Flow for Assessing Brain Function at Rest and During a Vigilance Task. *NeuroImage, 193,* 157-166.