SHIKANG PENG speng@research.baycrest.org | Toronto, ON, CA
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EDUCATION

University of Toronto 2024-Present
Ph.D., Cognitive Neuroscience
Advisor: Dr. Brian Levine

University of Chicago 2023-2024
M.A., Social Sciences–Psychology GPA: 3.87/4.0
Advisor: Drs. Wilma Bainbridge & Monica Rosenberg
Thesis: Predictability of memorability neural pattern and attention network in subsequent memory retrieval

University of Alberta 2019-2023
B.Sc., Psychology with Honors GPA: 3.83/4.0
First Class Honors
Advisor: Dr. Peter Dixon
Thesis: Text-based and memory-based metrices of cognitive coupling

PUBLICATIONS

Peng, S., Rosenberg, M.D., & Bainbridge, W. A. (In Prep). Predictability of memorability neural pattern and attention network in subsequent memory retrieval.

Feminella, J., **Peng, S.**, & St Jacques, P. (In Prep). Dimensionality affects memory for events in immersive virtual reality.

Peng, S., & Bainbridge, W.A. (2024). Image memorability enhances social media virality. *arXiv preprint.* https://doi.org/10.48550/arXiv.2409.14659

Peng, S., & Dixon, P. (In Press). Text-based and memory-based metrices of cognitive coupling. *C. J. Exp. Psychol.* https://doi.org/10.1037/cep0000349

Invited TALKS

Peng, S. & Bainbridge, W. A. (2024, Oct). Image memorability enhances social media virality. *BLRB (Bainbridge, Leong, Rosenberg, Bakkour) Labs Seminar*, University of Chicago.

CONFERENCE PRESENTATIONS

Feminella, J., **Peng, S.**, & St Jacques, P. (2024, April). Dimensionality affects memory for events in immersive virtual reality [Poster]. *Cognitive Neuroscience Society*, Toronto, ON, CA.

Peng, S., & Dixon, P. (2022, July). Mind wandering and temporal focus on task switching [Poster]. *Canadian Society for Brain, Behavior and Cognitive Science (CSBBCS)*, Halifax, NS, CA.

Peng, S., & Dixon, P. (2022, April). Involvement of mind wandering in the inconsistent contradiction effect during narrative reading [Poster]. *Royce Harder Conference*, Edmonton, AB, CA.

TEACHING EXPERIENCES

Teaching Assistant
PSY100H1 – Introductory Psychology Winter 2025
PSY201H1 – Statistics I Fall 2024

HONORS & RESEARCH AWARDS

Maroon Research Scholarship [$30,000] 2023
M.A. Director Scholarship [$2,000] 2023
Dean's Silver Medal in Science 2023
Clare Patershuk Travel Award [$750] 2022

Dean's Honor Roll in Science 2021-2023

PROFESSIONAL ACTIVITIES

Fundraising Committee for Toronto Area Memory Group (TAMeG) 2024-Present

TECHNICAL SKILLS

Languages:

- Python (PsychoPy & PyTorch), R, MATLAB, Bash, HTML

Software:

- Neuroimaging: FreeSurfer, SPM12, AFNI
- General: Vuze VR Studio, Unity, Qualtrics, TESTABLE, GitHub, Adobe Premiere Pro

Neuroimaging Methods:

- fMRI: Data Preprocessing (SPM12 & AFNI), Univariate Analysis, MVPA, Representational Similarity Analysis, Multi-Dimensional Scaling, Functional Connectivity (FC), Inter-/Intra-Subject FC, Functional Cofluctuations
- EEG/ERP: Data Preprocessing (EEGLAB), ERP Analysis

Analyses:

- Machine Learning: Linear/Polynomial Model, SVM/SVR, Decision Trees, Cross-Validation, Clustering, PCA/ICA, Feature Engineering, Ensemble learning, Natural Language Processing
- Bayesian Analysis: Regression, Casual modeling, MCMC, Multilevel modeling, GLM
- Deep Learning: DCNNs

CERTIFICATES

Computational Neuroscience 2023

Neuromatch Academy

REFERENCES

Brian Levine, Ph.D., C.Psych., ABPP-cn
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Wilma Bainbridge, Ph.D.
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Monica Rosenberg, Ph.D.
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Peter Dixon, Ph.D.
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Undergraduate thesis supervisor
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