




HOKI FUNG

Neuroscience PhD Student
David Geffen School of Medicine at UCLA

hokifung@g.ucla.edu 

<https://www.hokifung.com> 

EDUCATION



University of California, Los Angeles  2022 - Now
[Ph.D. Neuroscience](#)  Dean's Award

National University of Singapore  2020 - 2022
[M.Comp. Artificial Intelligence](#)

Selected Courses: Neural Networks and Deep Learning, AI Planning and Decision Making, Uncertainty Modeling, 3D Computer Vision

University College London  2015 - 2016
[M.Res. Cognitive Neuroscience](#)  Merit

Advisor: Prof. Sam J. Gilbert
Thesis: Decoding intentions of self and others from fMRI (Published)

University of California, Berkeley  2013 - 2015
[B.A. Psychology, \(Minor\) Education](#)  Departmental Honors

Advisors: Prof. Alison Gopnik, Dr. Adrienne O. Wente
Thesis: A cross-cultural study on causal inferences (Published)


SELECTED EXPERIENCES

Graduate Research Intern  2021 - Now
[Laboratory for Affective and Translational Neuroscience \(LATN\)](#)
[McLean Hospital/Harvard Medical School, USA](#)

- Leading an **fMRI-based functional connectivity analysis** using recently developed brain mapping methods
- Performing **statistical modeling** and **multi-level analyses** linking clinical, behavioral, and brain measures from a **clinical population**






Research Data Scientist  2019 - 2021
[Sleep and Cognition Laboratory and Clinical Imaging Research Centre](#)
[YYL School of Medicine, National University of Singapore](#)

- Initiated a study that investigates habits, global cognition, and brain structure in **healthy children** through analyzing a **large, public dataset** that has 10,000+ participants using **machine learning**
- Led multiple **MR data analyses** for **clinical studies** that involve different clinical groups, designs, and MRI modalities (**fMRI, sMRI, dMRI**)
- Implemented an automated preprocessing pipeline for brain images with stroke lesions that uses **deep learning** to perform lesion segmentation


Research Associate  2016 - 2018
[Clinical Brain Lab, Nanyang Technological University, Singapore](#)


- Led a **multimodal study** (from experimental design to data collection to manuscript write-up) involving 100+ **healthy** and **ADHD** participants
- Analyzed a **resting-state fMRI** dataset from **MCI** patients using **DARTEL** preprocessing and Independent Component Analysis (**ICA**)
- Helped standardize the lab's **SPM** preprocessing pipeline and developed **Matlab** scripts to automate the pipeline


Other Industry/Research Positions  [Details](#)

Cognitive Scientist, Neuroglee Therapeutics, SG  2021 - 2022
Newsletter Editor, Society for Neuroscience, SG  2021 - 2022
Data Analyst, Datature, SG  2018 - 2019
Graduate Student Assistant, UCL, UK  2015 - 2016
UG Research Assistant, UC Berkeley, USA  2013 - 2015

RESEARCH INTERESTS

 **Clinical Neuroscience**
- Neural basis of executive function
- Biomarkers for psychiatric disorders
- Precision psychiatry

 **Research Methods**
- Behavioral Experiments
- Wearable Technology
- Structural and functional MRI

 **Data Science**
- Conventional Statistics
- Machine learning
- Deep Learning







SKILLS AND LANGUAGES

Python R Matlab Bash SQL HTML CSS
Statistics Machine Learning Deep Learning Web Dev
Data Visualization Project Management LaTeX Git
PyTorch Tensorflow Caret Cantonese Mandarin

PUBLICATIONS [Full list](#)

- Fung, H.**, Yeo, B.T.T., Chen, C., Lo, J.C., Chee, M.W.L., and Ong, J.L. (accepted). Adherence to 24h movement recommendations and health indicators in early adolescence: Cross-sectional and longitudinal associations in the ABCD study. *Journal of Adolescent Health*.
- Gilbert, S. J. & **Fung, H.** (2018). Decoding intentions of self and others from fMRI. *NeuroImage*, 172, 278-290.
- Gopnik, A., O'Grady, S., Lucas, C., Griffiths, T., Wente, A., Bridger, S., Aboody, R., **Fung, H.**, and Dahl, R (2017). Changes in cognitive flexibility and hypothesis search from childhood to adolescence to adulthood. *Proceedings of the National Academy of Sciences*, 114(30), 7892-7899.

SELECTED AWARDS

-  Graduate Dean's Scholar Award, UCLA
-  Top Consumer AI Product, SLINGSHOT
-  Data Innovation Challenge, Rolls-Royce
-  Trustee's Prize, Dean College
-  President's List, Dean College
-  Harry L. Kreshpane Prize, Dean College

Please refer to my [CV](#) for a full list of work experiences, international conference presentations, and publications.