# Yin Ting, Lau

### Dezmeko@icloud.com

+852 91477607

#### **Education**

University of Birmingham, Birmingham, U.K. BSc Human Neuroscience

2018-2022

**Supervisor:** 

Professor Jonathan Lee

# **Research Experience**

Research Centre for Language, Cognition, and Neuroscience, The Hong Kong Polytechnic University, Hong Kong.

Research Assistant (January 2023 – Present)

Assisting Professor William Shi-Yuan Wang and Dr. Manson Fong with the project "Quantification of Brain Age by Functional MRI Data: Complexity and Functional Connectivity" and different bilingual studies projects. The main duties of the job are designing experiments, data analysis and MRI data analysis. The advanced knowledge of Python and Linux is learnt from the project.

Department of Psychiatry, University of Hong Kong, Hong Kong.

Research Assistant (August 2022 — December 2022)

Assisting Dr. Sherry Chan with the different projects on patients with Schizophrenia. Clinical assessments, cognitive tests, and interviews are given to the patients. Data management, data analysis, and MRI preprocessing are the key tasks of the job.

Visual Experience Laboratory, University of Birmingham, UK.

**Volunteer Research Assistant** (March 2019 — November 2019)

Assisting Dr. Sara Assecondi with the EEG correlates cognitive training project. Conducting experiments, Participants recruitment and data analysis with Python are the key tasks of the volunteer.

Sleep Research Clinic and Laboratory, The University of Hong Kong, Hong Kong.

**Research Internship** (July 2019 — August 2019)

Assisting Dr. Shirley Li with the Sleep Deprivation Study, Insomnia and Depression Treatment Study, School-based Napping Study, Sleep Disturbances in ADHD and Sleep Duration Variability and Cognitive Function. Conducting experiments, data collecting, data entry and participants recruitment are the key tasks of the internship.

#### Skills

**Software:** Microsoft Office Suite, SPSS, Jupyter Notebook, Anaconda Jupyter, R Studio,

MATLAB, XCode, PBS (Portable Batch System)

Operating System: Microsoft Windows, MacOS, Linux

Programming

Python, R, MATLAB, Unix Scripting, JSON

Language:

Data Mining Tool: NumPy, SciPy, Pandas, scikits-learn, TensorFlow (Machine Learning),

statsmodels (Data Processing and Modelling), Seaborn, Matplotlib (Data

Visualization)

Brain Image

FreeSurfer, FSL, ANTs, SPM, AFNI, NiPype, NIPY

**Processing Tools:** 

**Neuroimaging:** MRI, EEG, ECG

Language: Cantonese, English, Mandarin, Italian

# **Projects**

### **MRI Study**

Role: Research Assistant

PI: Professor Shi-Yuan Wang

Title: Quantification of Brain Age by Functional MRI Data: Complexity and Functional

Connectivity

Skills: fMRI Data Preprocessing, Data Analysis

### **Clozapine Mortality Study**

Role: Research Assistant
PI: Dr. Sherry Chan

Title: The Long-term Impact of Clozapine on Mortality, Hospitalization and Comorbidity in

Patients with Schizophrenia

Skills: Data Management, Data Processing, Data Analysis, Data Visualization

## Dissertation

Role: Principal Investigator

Supervisor: Professor Howard Bowman

Title: What Can We Search for Preconsciously?

**Details:** The main purpose of the project is to find out what classes of information the human brain

can search for, what it cannot. Rapid Serial Visual Presentation (RSVP) was used to determine how long an arbitrary item in an RSVP stream remains in the brain when not a

target.

## **Data Analysis Individual Project**

Role: Principal Investigator

Title: Bitcoin Data Exploration, Linear Regression and Price Prediction

Skills: Data Processing, Data Modelling, Data Visualization, Machine Learning