# Zhiqian (Catherine) Fang

59342510 | catherinefzq@gmail.com | https://catherinefzq.github.io/

## EDUCATION

**The University of Hong Kong, Hong Kong** **Jul 2024 – Present**
PhD Candidate in Psychiatry

**The University of Hong Kong, Hong Kong** **Mar 2023**
Master of Philosophy in Psychiatry
**Thesis:** Application of Statistical Learning Methods to Predict Psychopathological Symptoms and Well-being in Young People

**Columbia University Mailman School of Public Health, New York, United States** **May 2020**
Master of Science in Biostatistics **GPA: 3.5/4.0**
**Relevant Courses:** Data Science; Relational Databases and SQL Programming; Statistical Computing with SAS

**Rutgers University, New Jersey, United States** **May 2018**
**South China University of Technology (SCUT), Guangzhou, China (Joint Program)**
Bachelor of Science in Public Policy (Health and Environment) **GPA: 3.82/4.0**
Minor in Business Administration
**Honors and Awards:** Dean's Honor List (2016 – 2018); National Endeavor Fellowship (2016)

## WORK EXPERIENCE

**The University of Hong Kong, Department of Psychiatry, HK** **Aug 2023 – June 2024**
*Research Assistant*
• Administered clinical and cognitive assessments and operated MRI scans to patients with first-episode schizophrenia and first-episode bipolar disorder
• Conducted statistical analyses on antipsychotic utilization patterns and mortality rate among patients with psychotic disorders using population-based electronic health record database

**Columbia University Department of Psychiatry, NY** **Jan 2022 – July 2023**
*Data Analyst, LeeLab*
**Project:** Examining the effects of a risk factor gene for Alzheimer's Disease (APOE e4) and its associated neuropathologies on neuropsychiatric symptoms
• Preprocessed demographic, genetic, and neuropathology data from National Alzheimer's Coordinating Center collected since 2005
• Conducted mediation analysis with multiple mediators to examine the mediation role of APOE e4's associated neuropathologies on the causal pathway from APOE e4 to neuropsychiatric symptoms

**Columbia University Department of Psychiatry, NY** **Jun 2019 – May 2020**
*Research Assistant, LeeLab*
**Project:** Testing the association between brain structure change and cognitive ability change over time
• Manipulate and performed quality check using R on longitudinal data of brain structure and neural network
• Apply the latent change score model for examining the association and test the moderation by age, IQ, and education between latent variables

**New York State Psychiatric Institute, NY** **Feb 2019 – May 2020**
*Data Intern, Boricua Youth Study*
• Harmonized variables between waves in a longitudinal study launched in 2001 for over 2,000 Boricua children
• Identified inconsistencies in the fourth-wave dataset with over 3,000 records using SPSS
• Created Dialogix information system codebook for a next-generation study of Environmental influences on Child Health Outcomes (ECHO) program

## SKILLS

**Technical:** R, Python, Mplus, SAS, SQL, SPSS, Microsoft Office Master 2013
**Language:** Mandarin (native), Cantonese (native), English (fluent)