YI, Yueyang

Updated June 5, 2024

Email: yueyangyi@cuhk.edu.hk **Phone**: (852) 6502-2977 **Office**: CYT 1142
Website: www.yueyangyi.com **GitHub**: /yueyangyi **X**: @yi_yueyang

Research interests

Public health, artificial intelligence for medicine, big data in healthcare.

Education

Katholieke Universiteit Leuven Leuven, Belgium
MSc Statistics and Data Science Oct. 2018 – July 2023
Thesis: *Refining population mapping with night-time lights: a Bayesian spatio-temporal approach with SPDE-INLA.*

University College London London, UK
MSc Earthquake Eng. with Disaster Management Sep. 2017 – Jan. 2019
Thesis: *A novel nighttime-lights-based framework for the large-scale monetary flood risk assessment and mapping.*

University of Sheffield Sheffield, UK
BEng (Hons) Civil Engineering Sep. 2014 – June 2017
Thesis: *Smoothed-particle hydrodynamics modelling of free surface flows.*

Publications

Yi, Y., Du, Z.Z., Guo, Y. and Lam, T.Y.T. (2024) 'Real-time use of artificial intelligence in characterisation of diminutive polyps during colonoscopy: a systematic review and meta-analysis' [Poster], *Digestive Disease Week 2024.* Washington, D.C., 18-21 May.

Lam, T.Y.T., **Yi, Y.**, Cheung, M.F.K., Goh, W.W.B. and Sung, J.J.Y. (2024) 'Acceptance and trust of artificial intelligence in clinical practice among gastroenterology nurses' [Poster], *Digestive Disease Week 2024.* Washington, D.C., 18-21 May.

Lam, T.Y.T., **Yi, Y.**, Choi, K.C., Lui, R.N. and Sung, J.J.Y. (2024) 'Long-term effect of colorectal cancer screening by colonoscopy vs fecal immunochemical test in Chinese population. a cohort study with a median follow-up of 14 years' [Oral presentation], *Digestive Disease Week 2024.* Washington, D.C., 18-21 May.

Work in progress

Developing and validating a risk score to predict clinically significant prostate cancer among Asian men, with Thomas Lam.

Usage of Internet to promote healthy lifestyle among antenatal women: a cross sectional design, with Ying Lau.

Clinical effectiveness of artificial intelligence in optical diagnosis of neoplastic colorectal polyps during dolonoscopy, with Thomas Lam.

High-resolution population estimation exploiting national census and household survey: a Bayesian spatial model with SPDE-INLA, with Thomas Neyens.

Research experience

Stanley Ho Big Data Decision Analytics Research Centre
Chinese University of Hong Kong — Hong Kong SAR
Research assistant, with Prof Thomas YT Lam — Aug. 2023 – Present
Projects: risk score developments for multi-cancer screening; electronic medical record analyses; long-term retrospective studies on cancer screening strategies; dose-response effect analyses; artificial intelligence for medicine.

Water Equity Lab
University of California, Irvine — Irvine, USA
Visiting student, with Prof Maura Allaire — July 2019 – Aug. 2019
Projects: comparative studies on economic and engineering understandings on monetary flood risk; flood insurance popularisation.

Industry experience

United Nations ESCAP, IDD/IDS — Bangkok, Thailand
Intern — June 2022 – Nov. 2022
Projects: Asia-Pacific information superhighway; look-up tool for ICT-related databases and publications; website developments; digital climate data and digital connectivity data analyses.

SCOR, R&D — London, UK
Intern — June 2018 – Aug. 2018
Projects: disaster catalogue collection; disaster-induced loss mapping platform.

Skills

Programming
Proficient in: R (ANOVA, linear regression, generalised linear regression, time series models, survival analysis, robust statistics, Bayesian statistics, mixed effects models, nonparametric statistics, spatial and spatiotemporal models, meta analysis), SAS (sampling, multivariate statistics).
Familiar with: MATLAB (basic maths), Python (stochastic models, web scrapping, textual mining, interactive visualisation, machine learning).

Software
Statistics: BUGS, JAGS, INLA (Bayesian statistics), JMP (experimental design).
Geographic information systems: QGIS, ArcGIS.
Cloud: Alibaba Elastic Compute Service (ECS).
Productivity: Microsoft Office, R Markdown, LaTeX.

Languages

Mandarin (native), English (fluent), French (CEFR A2).