

Yudong CHEN

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Columbia House, London School of Economics and Political Science
Houghton Street, London, WC2A 2AE, United Kingdom

EMPLOYMENT

Research officer in Statistics

November 2021 – present

Department of Statistics, London School of Economics and Political Science

Hosted by Tengyao Wang, under his EPSRC grant on ‘Change-point analysis in high dimensions’

EDUCATION

University of Cambridge, United Kingdom

PhD in Statistics (awarded in 2023)

2018 – 2022

Thesis: High-dimensional online changepoint detection; Advisor: Richard J. Samworth and Tengyao Wang

B.A. and MMath

2014 – 2018

Results: First class (B.A.) and Distinction (MMath)

Tsinghua University, Beijing, China

2013 – 2014

Major: Pure and Applied Mathematics

RESEARCH INTERESTS

Changepoint detection, sequential testing, high-dimensional statistics, robust statistics and machine learning

PREPRINTS & PUBLICATIONS

Chen, Y., Wang, T. and Samworth, R. J. (2023) Inference in high-dimensional online changepoint detection. *J. Amer. Statist. Assoc.*, to appear.

Chen, Y., Wang, T. and Samworth, R. J. (2022) High-dimensional, multiscale online changepoint detection. *J. Roy. Statist. Soc., Ser. B*, **84**, 234–266.

Chen, Y., Chernov, R., Flores, M., Bourque M. F., Lee, S. and Yang, B. (2018) Toy Teichmüller spaces of real dimension 2: the pentagon and the punctured triangle. *Geom. Dedicata*, **197**, 193–227.

Li, M.*, Chen, Y.*, Wang, T. and Yu, Y. (2023+) Robust high-dimensional change point detection under heavy tails. *arXiv preprint*, arXiv:2305.18987. (*equal contribution)

STATISTICAL SOFTWARE

Chen, Y., Wang, T. and Samworth, R. J. (2020) **ocd**, an R package for high-dimensional multiscale online changepoint detection, version 1.1. Available from *CRAN*.

SCHOLARSHIPS & AWARDS

Smith–Knight Essay Prize (Group 2), Faculty of Mathematics, University of Cambridge

2020

Jardine Foundation Scholarship, Jardine Matheson

2014 – 2018

Henry Cavendish Scholar for top Maths student in college, Peterhouse, University of Cambridge

2017

Senior Burkill Prize for outstanding Maths students, Peterhouse, University of Cambridge

2016, 2017

Best Student Award, Shanghai High School

2013

TALKS

International Conference on Econometrics and Statistics (EcoSta 2023), Tokyo

August 2023 (to come)

Workshop on Change Point Analysis, Warwick

June 2023 (to come)

IMS Annual Meeting, London

June 2022

StatScale Research Workshop and Retreat, York

March 2022

StatScale Seminar, Lancaster University

June 2020

Research Students’ Conference in Probability and Statistics, Exeter

June 2019

Cantab Capital Institute Workshop, University of Cambridge

June 2019

TEACHING EXPERIENCES

Class teacher and lead help session teacher for ST202/206, London School of Economics *2022 – present*
ST202/206 (2nd year): Probability, Distribution Theory and Inference
Supervisor for undergraduate level statistics courses, University of Cambridge *2018 – 2021*
Courses: Statistics (2nd year), Principles of Statistics (3rd year)
Drop-in session helper for Part III master's level courses, University of Cambridge *2018 – 2019*
Courses: Modern Statistical Methods, Statistical Learning in Practice, Convex Optimisation
Teaching assistant for Statistical Computing course practical sessions, APTS *2019*
APTS: Academy for PhD Training in Statistics in UK
Statistics Clinic consultant, University of Cambridge *2018 – 2021*

PROFESSIONAL SERVICE

Referee for Annals of Statistics, Journal of the Royal Statistical Society Series B, Biometrika, Annals of Applied Statistics, Bernoulli and Journal of Computational and Graphical Statistics
Organiser and coordinator of the Cambridge Statistics Clinic *2020 – 2021*

SKILLS & OTHER

Programming: R, Matlab, Python, C++
Language: English (fluent) and Mandarin (native)

REFERENCES

Prof. Richard J. Samworth
Professor of Statistics, Director
Statistical Laboratory
University of Cambridge
Cambridge, United Kingdom
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Dr. Tengyao Wang
Associate Professor in Statistics
Department of Statistics
London School of Economics
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Prof. Paul Fearnhead
Distinguished Professor of Statistics
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