

# Kai Zhi TEH

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## Education

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**PhD Statistical Science** - University College London 2022-

Working on graphical causal inference.

**MEng Engineering Science** - St Peter's College, University of Oxford 2017-2021

First class classification.

2020-2021    Computer Vision, Machine Learning, Optimisation, Systems Control and Dynamics.  
4<sup>th</sup> Year Research Project

Graph Compression

2019-2020    Control Systems, Signal Processing, Software Engineering, Bio-mechanics and Bio-medical.  
3<sup>rd</sup> Year Group Project

Advanced Photonics Manufacturing Platform (adaptive optical confocal microscopy)

## Experience

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**University College London, UK** Feb 2022-

Postgraduate Teaching Assistant

Conducting undergraduate tutorials, demonstrations and marking exercises.

Modules include :    STAT0002(Introduction to Probability and Statistics)  
                              STAT0007(Stochastic Processes)  
                              BIOS0019(Life Sciences Foundation)

**Dell-Oxford Artificial Intelligence Society Summer Project** Jul 2021

Implementing reinforcement learning approaches to Dell business cases of selling technology as a service, particularly product-seller interaction.

Collaborated with business team of the project to produce business analytics of the project.

**St Peter's College, University of Oxford, UK** Feb 2020

Open Day Student Outreach Helper

Guiding A-Levels students around campus, and answering questions about life in University.

**SingHealth Duke-NUS Institute of Precision Medicine, Singapore** Jul-Aug 2019

Research Intern

Implementing LD Pruning on genotype samples.

Expanding upon previous year's work by verifying a recent correlation study between SNP (Single Nucleotide Polymorphism) and telomere length amongst Singaporean Chinese.

**Oxford Thermofluids Institute, University of Oxford, UK** Sep 2018

Software Intern

Fixing crash and reboot issues on engine temperature data measurement software.

Learning the practicalities of serial data communication through Python.

## SingHealth Duke-NUS Institute of Precision Medicine, Singapore

Jul-Aug 2018

Research Intern

Implementing LMM (Linear Mixed Modelling) on genotype data on phenotype traits.

Implementing statistical tests (KS-Tests) on correlation data to be compared to previous studies.

## Publications

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### Published

**Teh, K.Z.**, Sadeghi, K. & Soo, T. Localised natural causal learning algorithms for weak consistency conditions. In: Proceedings of the 40th Conference on Uncertainty in Artificial Intelligence. arXiv.2402.14775, 2024.

### PrePrints

**Teh, K.Z.**, Sadeghi, K. & Soo, T. A General Framework for Constraint-based Causal Learning, submitted for review. arXiv:2408.07575, 2024.

## Presentations

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### Posters

- Jul 2024 Localised Natural Causal Learning under Weak Conditions, **2024 Conference on Uncertainty in Artificial Intelligence**, Barcelona
- Apr 2024 A General Framework for Constraint-based Causal Learning, **European Causal Inference Meeting 2024**, Copenhagen

### Talks

- May 2024 Relaxing the Faithfulness Assumption in Causal Inference, **UCL Statistical Science PhD Seminars**, London
- Dec 2023 A General Framework for Causal Learning Algorithms, **2023 IMS International Conference on Statistics and Data Science**, Lisbon
- Sep 2023 The Role of Ordering in Causal Inference, **RSS International Conference 2023**, Harrogate

## Organisational Duties

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### UCL-ELLIS CSML Seminar Series

2022-

Invited and organised academic speaker seminars in computational statistics and machine learning.  
[https://ucl-ellis.github.io/jt\\_csml\\_seminar\\_home/](https://ucl-ellis.github.io/jt_csml_seminar_home/)

### Oxford Artificial Intelligence Society Committee

2017-2020

Hosted speaker events from corporations and academics in AI.  
<https://tinyurl.com/wjk4g5m>  
<http://tiny.cc/h2ngaz>

## Awards

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2022-2025 UCL Postgraduate Teaching Assistant Studentship  
2017-2021 Verdant Foundation - Cheng Kin Ku Scholarship

## Relevant Skills

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### Language

English	Fluent
Mandarin	Native
Malay	Grade A Proficiency in Malaysian O Levels (SPM)
Cantonese	Conversational