

# TIANMIN XIE

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## EDUCATION

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<b>University of Southern California</b> <i>Ph.D. in Data Sciences and Operations (Statistics); Advisor: Prof. Matteo Sesia</i>	<i>Aug 2022 - Present</i>
<b>University of Cambridge</b> <i>Master of Mathematics (Part III)</i>	<i>Oct 2021 - Jun 2022</i>
<b>University of Cambridge</b> <i>Bachelor's Degree in Mathematics</i>	<i>Oct 2018 - Jun 2021</i>
<b>Tsinghua University</b> <i>Bachelor's Degree (not completed) in Mathematics</i>	<i>Sep 2018 - Oct 2018</i>

## RESEARCH INTERESTS

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Conformal Inference, Causal inference, High-dimensional statistics

## AWARDS

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<b>Magdalene College Scholar</b>	<i>Nov 2019</i>
<b>College Prize for Mathematics</b>	<i>Jun 2019</i>
<b>Silver Medal in China Mathematical Olympiad (CMO)</b>	<i>Nov 2017</i>
<b>First place in Chinese High School Mathematics League (Shanghai Region)</b>	<i>Sep 2017</i>

## EXPERIENCE

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**Modern Changepoint Analysis** *Nov 2021 - Apr 2022*  
*Part III essay; advised by Prof. Richard J. Samworth* *University of Cambridge*

- This essay would synthesise, and potentially contribute to, recent developments in the changepoint analysis. These include, but are not limited to, both offline (retrospective) and online (sequential) changepoint detection and estimation; high-dimensional problems; changes in mean, in slope (in regression problems) or more general nonparametric changes; multiple changes; missing data.

**Statistical Inference on the Effect of Mass Vaccination** *Jul 2021 - Sep 2021*  
*Supervised by Dr Sergio Bacallado* *University of Cambridge*

- Stratified the population of people still susceptible to infection with the virus according to their vaccination status (unvaccinated/1 dose/2 doses). Incorporated estimates of community prevalence, by region and age group. Estimated a measure of ongoing transmission.

## SKILLS

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<b>Programming Language</b>	R, MATLAB, Python Chinese, English
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