

# Jiaqi Lu

Mathematical Institute  
University of Oxford  
University of Oxford, University Offices, Wellington Square

(+86) 132-6173-4001  
[jiaqi.lu@linacre.ox.ac.uk](mailto:jiaqi.lu@linacre.ox.ac.uk)  
<https://luakey.github.io/homepage>

## Education

### **M.S., University of Oxford, 2022 to 2023 (expc.)**

- **Major:** Mathematics and Foundation of Computer Science, Mathematical Institute

### **B.S., Beijing University of Posts and Telecommunications, 2018 to 2022**

- **Major:** Computer Science and Technology, School of Computer Science and Technology
- **Rankings:**15/386; **GPA:**91.05/100 or 3.77/4.0

## Research Interests

the intersection of logic and complexity theory

## Research Projects

### **Information-Theoretic Approximation of Large Markov Chains**

**McMaster University**, Supervisor: Prof. George Karakostas

2021 Jun to 2021 Sept

- Studied, both theoretically and experimentally, methods of MC reduction, formulated them as optimization problems, and then developed provably good algorithms for solving the latter.
- Explored the connections of the MC reduction problem to Machine Learning.
- Finished the problem formulation and modeling side and focused on theoretical analysis of proposed solutions.

### **Recursive Teaching Dimension Versus VC Dimension**

**Institute of Computing Technology, CAS**, Supervisor: Prof. Xingwu Liu

2020 spring to 2021 fall

- Studied the quantitative relation between RTD and the well-known learning complexity measure VC dimension (VCD).

## **Visiting and Internship**

**Department of Computing Software**, McMaster University (remote).  
MITACS internship from 2021 Jun to 2021 Sept, advised by George Karakostas.  
**Institute of Computing Technology**, Chinese Academy of Sciences, Beijing.  
Research Intern from 2020 spring to 2021 fall, advised by Xingwu Liu.

## **Selected Awards and Scholarships**

2019 The Third Prize National Scholarship  
2020 The Third Prize National Scholarship

## **Computer Skills**

C, C++, Latex, MATLAB and Python

## **Language**

Native Chinese (Mandarin)  
Fluent English