

Curriculum Vitae

Li, Kwing Hei

June 2022

Basic Info

Name: Hei Li

Email: Hei.Li@cl.cam.ac.uk

Web: <https://hei411.github.io/>

Research Topics

The very heart of my research interests is programming languages. I develop mathematical models and methods that enable us to design, implement, and reason about computer programs.

At the moment, I am especially interested in techniques from type theory, separation logic, and combinatorial topology for concurrent programs and distributed systems.

Education

- | | |
|-------------|--|
| 2022 - Now | M.Phil in Advanced Computer Science
King's College, University of Cambridge |
| 2019 - 2022 | B.A. Hons. in Computer Science with Mathematics (1st class)
Churchill College, University of Cambridge
Title: Type Systems for Functional Reactive Programming [pdf] |

Experience

- | | |
|------|--|
| 2022 | Research Intern
Max Planck Institute for Software Systems
Supervisor: Prof. Derek Dreyer |
| 2021 | Undergraduate Research Intern
University of Cambridge Machine Learning Systems Lab
Supervisor: Prof. Nicholas Lane and Dr. Pedro Porto Buarque de Gusmao |

Awards

- | | |
|------|--|
| 2022 | Cambridge Trust and King's College TPP Alan Turing Scholarship |
| 2022 | University of Oxford Hong Kong Jockey Club Graduate Scholarship (declined) |
| 2021 | Beatrice Blore-Browne Prize Scholarship |
| 2021 | Churchill Prize Scholarship |
| 2021 | Churchill Computer Science Talks Series – Audience Favourite Talk |
| 2020 | Churchill Honorary Scholarship |

Publications

2022

Secure Aggregation for Federated Learning in Flower [\[pdf\]](#)

Kwing Hei Li, Pedro Porto Buarque de Gusmão, Daniel J. Beutel, Nicholas D. Lane
In DistributedML 2021: Proceedings of the 2nd ACM International Workshop on Distributed Machine Learning