

Curriculum Vitae

Li, Kwing Hei

October, 2022

Basic Info

Preferred name: Hei Li

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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 also interested in other related topics, such as formal verification, and the theory of concurrency and distributed systems.

Education

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| 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

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| 2022 | Research Intern
Max Planck Institute for Software Systems
Supervisor: Prof. Derek Dreyer and Mr. Michael Sammler |
| 2021 | Undergraduate Research Intern
University of Cambridge Machine Learning Systems Lab
Supervisor: Prof. Nicholas Lane and Dr. Pedro Porto Buarque de Gusmao |
| 2020 | Automation Engineer Intern
DreamsAI, Hong Kong |

Roles

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| 2022 - Now | Safety and Welfare Officer
Churchill College Boat Club |
| 2021 - 2022 | Computing Officer
Churchill College JCR Committee |
| 2020 - 2022 | Coxing Captain
Churchill College Boat Club |

Awards

2022	Cambridge Trust and King's College TPP Alan Turing Scholarship
2022	University of Oxford Hong Kong Jockey Club Graduate Scholarship (declined)
2022	Churchill Prize Scholarship
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 <i>In DistributedML 2021: Proceedings of the 2nd ACM International Workshop on Distributed Machine Learning</i>
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Unpublished Drafts

2022	Formalizing May's Theorem [pdf] Kwing Hei Li
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