

Curriculum Vitae

Li, Kwing Hei

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Basic Info

Preferred name: Heili

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

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

Education

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| 2022 - Now | M.Phil in Advanced Computer Science
King's College, University of Cambridge
Title: Wait-Free Task Solvability of Asynchronous Distributed Models |
| 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 |

Awards

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| 2022 | Beatrice Blore-Browne Prize Scholarship |
| 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
In DistributedML 2021: Proceedings of the 2nd ACM International Workshop on Distributed Machine Learning

Unpublished Drafts

2022 **Formalizing May's Theorem** [\[pdf\]](#)
Kwing Hei Li

2022 **Flower: A Friendly Federated Learning Research Framework** [\[pdf\]](#)
Daniel J. Beutel, Taner Topal, Akhil Mathur, Xinchu Qiu, Javier Fernandez-Marques, Yan Gao, Lorenzo Sani, Kwing Hei Li, Titouan Parcollet, Pedro Porto Buarque de Gusmão, Nicholas D. Lane

Roles

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

Skills

Coding: Haskell, C++, Java, OCaml, Coq, Python, Eva

Languages: English (fluent), Cantonese (fluent), Mandarin (conversational)