

Fangyi Zhou (周方易)

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<https://github.com/fangyi-zhou>

Pronouns: **they/them**

EDUCATION

- PhD in Computing** Imperial College London Sep 2019 — present
Supervisor: Professor Nobuko Yoshida
Research Topics: Multiparty Session Types, Refinement Types, Type Systems, Concurrent Processes
Expected Thesis Submission: 2023
- MEng in Computing** Imperial College London (1st Class Honours, Overall 86.89%) Oct 2015 — Jun 2019
Dean's List for Years 1, 2, 3 and 4
Awards: Adrian Israel Memorial Prize, Corporate Partnership Programme Prize, G-Research Ltd Prize, Corporate Partnership Programme Award, Governors' Prize (for **best overall performance**)

EXPERIENCE

- Research Assistant** Imperial College London/University of Oxford Sep 2019 — Mar 2023
Worked in the Mobility Research Group under the supervision of Professor Nobuko Yoshida, supported by EPSRC Grants. (Sep 2019 — Sep 2022 at Imperial, Oct 2022 onwards at Oxford due to PI movements)
- Graduate Teaching Assistant** Imperial College London Oct 2019 — Jun 2022
Worked in the Department of Computing on the *Concurrent Processes* course (4th year undergrad./master level).
- Software Engineering Intern (Industrial Placement)** Facebook UK Apr 2018 — Sep 2018
Worked in Hack Language team on the type checker, and in Sapienz team on improving categorisation of crashes of mobile applications.
- Undergraduate Teaching Assistant** Imperial College London Oct 2017 — Mar 2018
Worked in Department of Computing to provide group tutorial support for 1st year undergraduate students.
- Research Intern** Arm Jul 2017 — Sep 2017
Worked in Security Research Group on specification and verification of data structures used in hypervisor software for embedded systems.

PUBLICATION

- [1] A. D. Barwell, A. Scalas, N. Yoshida, and F. Zhou. "Generalised Multiparty Session Types with Crash-Stop Failures". In: *33rd International Conference on Concurrency Theory (CONCUR 2022)*. Vol. 243. Leibniz International Proceedings in Informatics (LIPIcs). Dagstuhl, Germany: Schloss Dagstuhl – Leibniz-Zentrum für Informatik, 2022, 35:1–35:25. DOI: [10.4230/LIPIcs.CONCUR.2022.35](https://doi.org/10.4230/LIPIcs.CONCUR.2022.35).
- [2] A. Miu, F. Ferreira, N. Yoshida, and F. Zhou. "Communication-Safe Web Programming in TypeScript with Routed Multiparty Session Types". In: *Proceedings of the 30th ACM SIGPLAN International Conference on Compiler Construction*. CC 2021. Virtual, Republic of Korea: Association for Computing Machinery, 2021, pp. 94–106. DOI: [10.1145/3446804.3446854](https://doi.org/10.1145/3446804.3446854).
- [3] N. Yoshida, F. Zhou, and F. Ferreira. "Communicating Finite State Machines and an Extensible Toolchain for Multiparty Session Types". In: *Fundamentals of Computation Theory*. Cham: Springer International Publishing, 2021, pp. 18–35. DOI: [10.1007/978-3-030-86593-1_2](https://doi.org/10.1007/978-3-030-86593-1_2).
- [4] A. Miu, F. Ferreira, N. Yoshida, and F. Zhou. "Generating Interactive WebSocket Applications in TypeScript". In: *Proceedings of the 12th International Workshop on Programming Language Approaches to Concurrency and Communication-centric Software*. Vol. 314. Electronic Proceedings in Theoretical Computer Science. 2020, pp. 12–22. DOI: [10.4204/EPTCS.314.2](https://doi.org/10.4204/EPTCS.314.2).
- [5] F. Zhou, F. Ferreira, R. Hu, R. Neykova, and N. Yoshida. "Statically Verified Refinements for Multiparty Protocols". In: *Proc. ACM Program. Lang.* 4.OOPSLA (Nov. 2020). DOI: [10.1145/3428216](https://doi.org/10.1145/3428216).

PROFESSIONAL ACTIVITY

- Programme Committee: ICE 2023
- Reviewer: PLACES 2022
- Translation: *Programming Language Foundations in Agda* (Simplified Chinese)

SKILL

Programming OCaml, Python, Rust, Golang, TypeScript, ...

Languages Chinese (Mandarin), English, German, Japanese