

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 — Aug 2023
Thesis Title: Refining Multiparty Session Types (Passed viva with minor corrections, pending award)
Topics: Multiparty Session Types, Refinement Types, Distributed Systems, Programming Languages

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

Applied Scientist Amazon Prime Video, UK May 2023 — present
Working in Studios AI Lab. Worked in Automated Reasoning.

Research Assistant Imperial College London/University of Oxford, UK 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, UK Oct 2019 — Jun 2022

Software Engineering Intern (Industrial Placement) Facebook, UK Apr 2018 — Sep 2018
Worked in Hack Language team and Sapienz team.

Undergraduate Teaching Assistant Imperial College London, UK Oct 2017 — Mar 2018

Research Intern Arm, UK Jul 2017 — Sep 2017
Worked in Security Research Group.

PUBLICATION

- [1] A. D. Barwell, P. Hou, N. Yoshida, and F. Zhou. "Designing Asynchronous Multiparty Protocols with Crash-Stop Failures". In: *37th European Conference on Object-Oriented Programming (ECOOP 2023)*. Vol. 263. LIPIcs. Received **Distinguished Paper Award**. 2023, 1:1–1:30. DOI: [10.4230/LIPIcs.ECOOP.2023.1](https://doi.org/10.4230/LIPIcs.ECOOP.2023.1).
- [2] 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. LIPIcs. 2022, 35:1–35:25. DOI: [10.4230/LIPIcs.CONCUR.2022.35](https://doi.org/10.4230/LIPIcs.CONCUR.2022.35).
- [3] 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. ACM, 2021, pp. 94–106. DOI: [10.1145/3446804.3446854](https://doi.org/10.1145/3446804.3446854).
- [4] 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).
- [5] 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. EPTCS. 2020, pp. 12–22. DOI: [10.4204/EPTCS.314.2](https://doi.org/10.4204/EPTCS.314.2).
- [6] 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
- Artifact Evaluation Committee: COORDINATION 2024
- Reviewer: PLACES 2022
- Translation: *Programming Language Foundations in Agda* (Simplified Chinese)

SKILL

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

Languages Chinese (Mandarin), English, German, Japanese