Fangyi Zhou （周方易）

me@fangyi.io | https://github.com/fangyi-zhou | Pronouns: **they/them**

EDUCATION

PhD in Computing Imperial College London   Sep 2019 — Aug 2023 (Awarded Mar 2024)
    Thesis Title: Refining Multiparty Session Types
    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/Universify 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 – Mar 2023 at Oxford due to supervisor moved)

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] F. Zhou. "Refining multiparty session types". PhD thesis. Imperial College London, 2024. DOI: 10.25560/110416.

[2] 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.

[3] 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.

[4] 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.

[5] 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.

[6] 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.

[7] 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.

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