Tim Forrer

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SUMMARY

Doctoral student at the University of Tokyo with extensive programming experience, a strong collaborative approach, and a proven ability to learn technical concepts at pace. Passionate about applying cutting-edge technology to solve real-world problems and break down barriers to innovation.

EDUCATION

Physics PhD - University of Tokyo, Japan   Oct 2022 - Present
- Researching new approaches to quantum computing inspired by functional programming.
- Taking a lead role in conducting the research, working with researchers from the UK and France.

Physics Research Student - University of Tokyo, Japan   Oct 2021 - Sept 2022
- Worked with industry on an open source Python library based on joint theoretical research.
- Gained greater proficiency with software development as part of a team—particularly regarding best practices with Git, code reviews, and unit testing.
- Repository available at: github.com/CQCL/pytket-dqc

Natural Sciences MSci (1st Class Honors) - Durham University, UK   Oct 2017 - Jul 2021

RELEVANT EXPERIENCE

Science, Technology, and Innovation Governance Program - Japan   May 2024 - Present
- Interdisciplinary program that allows students to take graduate modules from other departments beyond their primary field of study.
- Through the Machine Learning for Economics course, gained hands-on experience with Python ML libraries for economic forecasting.
- Despite having no prior economics background, was able to pick up new technical concepts quickly—achieving a maximum grade at the end of the course.

iOS App Developer (Swift) - UK   Jul - Aug 2019
- Tasked with producing an iOS application to assist new Physics students with everyday life.
- Having no prior experience with Swift or UI/UX development and being the sole developer, had to learn rapidly in order to produce a minimum viable product in eight weeks.
- Repository available at: github.com/tim-forrer/DurPhys

AWARDS AND CERTIFICATIONS

Embassy-Recommended MEXT Scholarship   Oct 2021 - Present
- Awarded by the Ministry of Education, Culture, Sports, Science and Technology for Japan on the recommendation of the Japanese Embassy in the UK.

Natural Sciences Award for Outstanding Achievement   Jun 2020, Jun 2021
- Awarded twice consecutively in recognition of strong academic achievement at Durham University.

SKILLS

Languages: English (Native), Japanese (Intermediate), Mandarin Chinese (Intermediate)