**CV**

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](https://github.com/CQCL/pytket-dqc)

**Natural Sciences MSci (1st Class Honors)** -Durham University, UKOct 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](http://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)