**CV**

Timothy Forrer

[tim.d.forrer@gmail.com](mailto:tim.d.forrer@gmail.com) | +81 (0) 80 9405 7118

SUMMARY

Doctoral student conducting research in quantum computing. Strong foundation in mathematical modeling (both analytical and numerical) and extensive programming experience. Keen interest in financial markets and systematic trading, demonstrated by additional enrollment in courses offered by the Graduate School of Economics alongside doctoral research.

EDUCATION

**Physics PhD** - University of Tokyo, Japan Oct 2022 - Present

* Researching the identification of features and relationships in quantum theory that can be leveraged for better understanding quantum computing.
* Presented research at international conferences and workshops as both an invited speaker and via poster sessions, to audiences of experts and laypersons alike.
* Poster sessions in particular built the ability to proactively communicate clearly and concisely.

**Physics Research Student** - University of Tokyo, Japan Oct 2021 - Sept 2022

* Developed a Python library as a complete implementation of prior theoretical research.
* Conducted as part of a small team working with a company from the UK.
* Work had to be done independently due to the time difference between Japan and the UK, with weekly progress reports and future planning with the rest of the team.
* This work culminated in two peer-reviewed published papers, and required strong attention to detail to ensure there were no errors in the theory or its realization as a Python library.

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

* Studied mathematics and physics, with modules including Calculus and Probability, Linear Algebra, and Advanced Theoretical Physics.

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.

**Science, Technology, Innovation Governance (STIG) program** May 2024 - Present

* Voluntary program offered by the University of Tokyo to give students interdisciplinary expertise.
* Enrolled in courses from Graduate Schools of Economics and Public Policy.
* Course in Data Science for Practical Economics module included optimising portfolio weightings through the use of machine learning to forecast expected returns.
* Awarded maximum grade in this module, despite it being the first exposure to formal economics.

**Natural Sciences Award for Outstanding Achievement** Jun 2020, Jun 2021

* Awarded twice consecutively in recognition of strong academic achievement at Durham University.