

Ph.D. Researcher and Project Associate in Quantum Technologies, Public Outreach and Responsible Technology (75%)

About us

This opportunity is offered by the chair of Public Policy, Governance and Innovative Technologies at the TUM School of Social Science. As an interdisciplinary, public-interest-minded, and impact-oriented team based at the TUM School of Social Sciences and Technology, we study, teach, and shape in practice a broad range of policy and governance issues concerning innovative technologies. We work closely with external partners from academia, business, and society, such as Harvard University, the Global Network of Internet & Society Centers, UNESCO, and OECD, among many others.

As we are a very interdisciplinary team, we as well run the Quantum Social Lab at the TUM Think Tank, where the project QuantWorld is located. The Quantum Social Lab was founded in 2022 to explore the interdisciplinary field of the ethical, legal, societal, and political implications of tomorrow's quantum technologies. We invite the graduate student taking on this position being part of the Quantum Social Lab and the chair of Public Policy, Governance and Innovative Technologies while being an integral part of the QuantWorld project.

About the QuantWorld project:

The QuantWorld project aims to impart knowledge of second-generation quantum technologies in a target-group-oriented way and to make it possible to experience them. For knowledge transfer, we are building a module-based QuantWorld learning platform with certification options. The central target group of our digital QuantWorld learning platform are citizens, whom we are picking up from their workplaces for a demand-oriented introduction to the topic, whereby in this project we are concentrating on the topic worlds of "medicine", "banking" and "mobility".

QuantWorld Challenges - artistic intervention with the QuantWorld target groups: The artistic interventions of the QuantWorld-Challenges serve us in the project as a means of translating the complexity of Second Generation quantum technologies to the citizens, but also as a means of technological innovation. An artistic intervention allows us to experience the social transformations through the establishment of second-generation quantum technologies. The artistic interventions are to be digitally created or documented in extended reality formats so that they can be made accessible to all citizens.

Requirements

We are excited to collaborate with a highly motivated researcher who shares our deep interest in exploring policy and governance issues that emerge in the context of quantum technologies of the second generation as well as possible future scenarios and quantum applications. The candidate also brings the following qualifications:

- Master's degree with a substantive focus on policy, governance, regulation, science communication, quantum technologies, computer science or mathematics and excellent grades
- Either knowledge on quantum technologies or the interest and ability to dive into the functionality and possible application opportunities for quantum technologies.
- Intellectual curiosity and an open mindset
- Ability and motivation to work both independently and as member of teams
- Organizational skills and excitement to work in a fast-paced, cross-cultural, and interdisciplinary environment
- Commitment to diversity and inclusion
- Very good English skills, with knowledge of the German language as a plus
- Prior working experience (incl. internships or volunteer work) is preferred

Tasks

- Conducting research for the QuantWorld Project
- Creating learning modules in the area of basics of Quantum Technologies and application of quantum technologies of the second generation within the mobility sector
- Carry out project management tasks for the QuantWorld Project supervised by the project lead
- Contributing to the intellectual life and community at the Quantum Social Lab
- Supporting organizational tasks (e.g. organizing conferences, hackathons and workshops)

Our offer

We offer exciting opportunities to participate in cutting-edge research, education, and outreach in a highly collaborative, interdisciplinary, and internationally networked environment, tackling some of the hardest problems in the field of policy and governance of innovative technologies with a commitment to the public good. We as well offer the possibility to dive deep in one of the most promising emerging technologies and its (future) applications as well as the opportunity to build your own dissertation project focusing on either the social science or technology side of this intriguing topic.

We invite you to join us on the inner-city campus of the Technical University of Munich.

You have the possibility to do your dissertation either at the Chair of Public Policy, Governance and Innovative Technologies (Prof. Dr. Urs Gasser), the Social Computing Group (Prof. Dr. Georg Groh) or you find a supervisor in a project-related field yourself.

What to expect:

- The possibility of carrying out a dissertation project in the fields of public policy, governance, and regulation, quantum technologies or computer science while earning a doctoral degree (Dr. rer. pol., Dr. oec. publ., Dr. phil., Dr. rer. soc., Dr. jur. or Dr. rer. nat.)
- Working in a cutting-edge outreach project funded by the national ministry for education and research (BMBF)
- Being part of the Quantum Social Lab with the opportunity to shape and build a new lab at the TUM Think Tank
- Working in a collaborative team of researchers from education, legal, and computer science over the course of two years and the opportunity work complete a truly interdisciplinary dissertation project
- The opportunity to participate in collaborative academic publishing and engage with the broader scientific community through workshop and/or conference visits.
- Mentorship and continuous support in building an independent academic and professional profile.
- Remuneration according to the collective agreement for the public service of the federal states (TV-L) in the classification TV-L 13 to the extent of 75 %.

The chosen candidate will be employed at the Professorship of Public Policy, Governance, and Innovative Technology. The employment contract is limited to three years.

Application

TUM is an equal opportunity employer and explicitly encourages applications from women and gender-non-binary persons. The position is suitable for disabled persons. Disabled candidates with essentially the same qualifications and scientific performance as other candidates will be given preference.

Find out more about us at www.tum.de.

We look forward to receiving your informative documents (cover letter, CV and references, summarized in a single PDF file). We will review applications on a continuous basis thus, they should be submitted as early as possible via e-mail to: **fabienne.marco@tum.de**

Data

Protection

Information:

When you apply for a position with the Technical University of Munich (TUM), you are submitting personal information. With regard to personal information, please take note of the data protection information on collecting and processing personal data contained in your application in accordance with Art. 13 of the General Data Protection Regulation (GDPR). By submitting your application, you confirm that you have acknowledged the above data protection information of TUM.

Contact: fabienne.marco@tum.de