



Jarn de Jong

jarn@jarndejong.nl [Jarndejong.nl](http://jarndejong.nl)

Quantum Physicist,
Cryptographer, Developer



[List of publications](#)

Bio

Quantum physicist with a strong background in a wide range of topics. Software developer & tech enthusiast with a strong track record in Python, self-hosting, Docker and more.

Phd (summa cum laude) in quantum communication & cryptography, BSc. & MSc. in Applied Physics.

Programming & Computer skills

Python

Linux/bash

Docker

Networking

Self-hosting

Latex

Quantum skills

Networking & communication
Stabilizer & graph states

Multipartite entanglement

Local Equivalence

QKD & CKA

Anonymity in quantum networks

Photonic systems

Distributed systems

QECC & Fault-tolerance

State- and Process tomography

Quantum Internet use cases

Languages

Dutch Native

English C2

German B1-B2

Experiences

2022-2025		Quantum Internet Alliance	Use Case team member
Project management, use case development and simulation, reporting.			
May 2023		LIP6 (Sorbonne Université)	Visiting researcher
Research visit at the LIP6 team. Present earlier work and collaborate with multiple researchers.			
2020-2025		Technische Universität Berlin	Scientific Employee
Designing & giving lectures, student supervision, scientific talks.			
2019-2020		QuTech	Research assistant & software developer
Hardware- and software development, simulations. Work span off into Q*Bird.			
2019		TNO	Quantum Technology Intern
Design and develop experiments for upcoming quantum device. Software development.			
2014-2015		Gymnasium Sorghvliet	Physics teacher intern
Half-year teaching internship for high school physics. Culminated in official qualification.			

Education and qualifications

2020-2024		TU Berlin, DE	PhD (Dr. Rer. Nat.)	Summa cum laude
Thesis under Anna Pappa in her quantum communication & cryptography group.				
2016-2019		TU Delft, NL	MSc. Applied Physics	GPA: 8.4
Quantum technologies track, thesis under Barbara Terhal at QuTech.				
2014-2015		TU Delft, NL	High school teaching qualification	N/A

High school physics teaching qualification with half-year internship at Gymnasium Sorghvliet during minor of BSc.

Thesis under prof. M. Verhaegen at Delft Centre for Systems and Control.

Personal projects and extracurricular activities

Software projects	
Various software projects, e.g. the Graphstabilizer package and Spotify2PlexPlaylistSyncer .	
Self-hosting	
2011-2025	Tutor, teaching (assistant), designing courses
High school tutoring, being teaching assistant, giving retake courses, designing and giving MOOC's.	
2012-2017	Various student committees
President of case tour- and symposium committee, member of various other committees.	