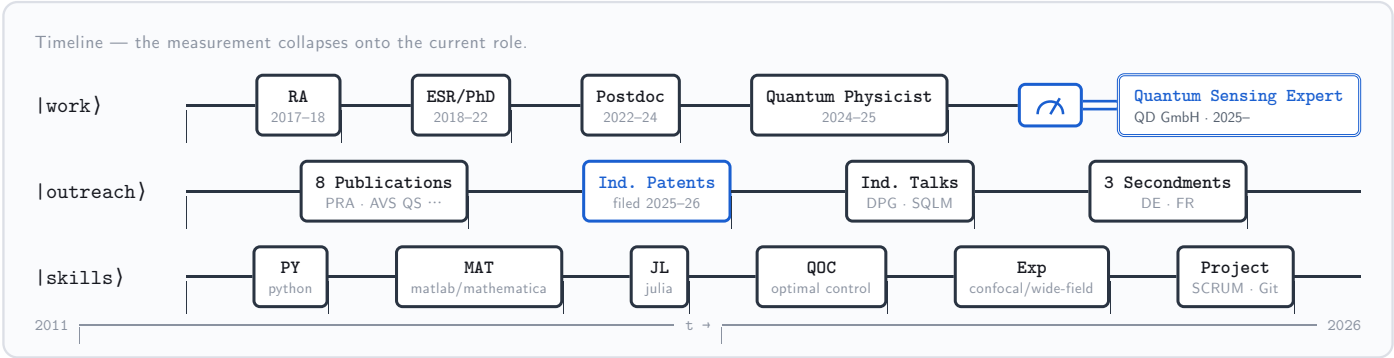


|physicist) → U(sensing, control, information) → |QTech industry)

2011–16	'17	2018–22	2022–24	'24	2025–
MSC · CUTN	LUND	PHD · MSCA ESR	RPTU	FZ JÜLICH	QUANTUMDIAMONDS
EDUCATION			RESEARCH		INDUSTRY

Profile

Quantum physicist translating diamond-based NV magnetometry into industrial semiconductor failure analysis and metrology; experienced from fundamental theory through experiment design and lab automation to industry-ready product deployment, with a diverse record of collaboration, research and outreach in quantum technologies.



Portfolio

Munich · Germany Jan 2025 – present

Quantum Sensing Expert
QuantumDiamonds GmbH

Diamond quantum sensing for semiconductor failure analysis at IC level; SCRUM hardware & protocol projects; product support. **Industrial patents filed.**

Jülich · Germany Feb 2024 – Jan 2025

Quantum Physicist
Peter Grünberg Institute, FZ Jülich GmbH

Quantum information with solid-state spins; optimal control. BMBF SPINNING; solid-state quantum processors.

Kaiserslautern · Germany Mar 2022 – Feb 2024

Postdoctoral Researcher
Biophysics & Quantum Sensing, RPTU

NV optimal control, widefield imaging, charge-state readout; life-science & materials use. QuantUK course; Nachwuchsring 2023.

Kaiserslautern & Saarbrücken · Germany Jun 2018 – Mar 2022

Marie Skłodowska-Curie ESR · PhD
RPTU & Universität des Saarlandes

Optimal control for NV sensing; single-NV confocal setup, pulse synthesis. Secondments: Stuttgart · THALES (FR) · Jülich.

Lund · Sweden Sep 2017 – Mar 2018

Research Assistant
Quantum Information Group, Lund University

Feedback wavefront shaping with LCoS spatial light modulators.

Output log 2019 – 2026

Publications & Talks

8 peer-reviewed publications — Phys. Rev. A, AVS Quantum Sci., Nanomaterials, Adv. Opt. Mater. ... · **industry talks** — DPG 2025, SQLM 2025 · **Google Scholar** ↗

► Education

PhD in Physics — TU Kaiserslautern · 2022
Integrated Master's in Physics — CU Tamil Nadu · 2016

► Personal

EN professional · DE working · HI native
Indian citizen · **German permanent resident**

► Toolchain

Git · agentic-AI workflows · Agile/SCRUM
Instrument control · GUIs · data analysis · quantum simulation