

# Cem Nurlu

## CONTACT

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## EDUCATION

### TU DELFT

**MSc APPLIED PHYSICS, — DELFT, NETHERLANDS**  
2023-Present

Expected Graduation: June 2025

- Following Track: Physics for Quantum Devices and Quantum Computing

### BOGAZICI UNIVERSITY

**BSc PHYSICS — ISTANBUL, TURKEY**

2018 - 2023

GPA: 3.16

- QTurkey Quantum Student Branch - Lead and Co-Founder(2020-2023)
- Bogaziçi University Dance Club - (2020-2021) –Board Member & Accountant (2021-2022) –President (2022-2023) –Chairman of the Supervisory Board

### BAHCESEHIR COLLEGE SCIENCE HIGHSCHOOL

GAZIANTEP, TURKEY

2014-2018

GPA: 99,87/100 | Valedictorian

## SKILLS

Python

HTML & CSS & JS

Q# and Qiskit Frameworks

Machine Learning & DL

Quantum Computing

Generative Models

Data Analysis

Computer Vision, NLP, LLMs

LaTeX

SQL

Digital Electronics

## LANGUAGES

Turkish - Native

English - C2 (TOEFL:114)

Turkish Sign Language - Proficient

French - Limited

## PUBLICATIONS

- [1] U. Birkan, Ö. Salehi, V. Olejar, C. Nurlu, and A. Yakaryilmaz. Implementing quantum finite automata algorithms on noisy devices. In *International Conference on Computational Science*, pages 3–16. Springer, 2021.

## EXPERIENCES AND RESEARCH

### QINTERN 2020 | RESEARCH INTERN

Jun 2020 - Mar 2021

Studied and researched Quantum Finite Automata's (MCQFA) with Abuzer Yakaryilmaz and Özlem Salehi and gave a presentation on the research. Continued and published paper on the project after the internship.

- Developed new and improved circuit-based implementations for QFA algorithms recognizing the  $\text{Mod}_p$  problem using the Qiskit framework on noisy devices.
- Awarded 1st place for the best results and 2nd place for the best presentation.
- Poster accepted to QIP Conference 2020.
- The paper was accepted to ICCS 2021 for publication and presentation and nominated for best paper.

### MICROSOFT, GLOBAL SHAPERS ANKARA HUB, QTURKEY

#### Q # TRAIN THE TRAINER

Jan 2020 – June 2020

In a project partnership of Microsoft, Global Shapers Ankara and QTurkey, trained by the Microsoft Quantum Team to lead Q# Workshops on their behalf.

- Structured, prepared, organized and gave multiple Q# workshops.
- The project won the Be the Change Award by Microsoft.
- Currently continuing a project with **Mariia Mykhailova** to develop workbooks for the Quantum Katas.

### QWORLD / QTURKEY | ORGANIZER / LECTURER

June 2019 – Currenty

- Organized and led multiple quantum programming and IBM Qiskit workshops, domestic & worldwide, mentored and gave lectures to 1000+ attendees.
- Organized a Quantum Computing Game Jam (Qoyun), mentored attendees.
- Gave and moderated talks on various topics from quantum computing.

### EARTH-ML | RESEARCHER

Feb 2020 – Jan 2022 | Boğaziçi University

Worked with **Prof. Dr. Arkadas Ozakin** to detect and understand earthquakes with higher accuracy and sensitivity using machine learning methods.

- Worked on time series analysis and featurization of noisy data.
- Handled, created and worked on large volume datasets.
- Gave talks and trained the new researchers on machine learning methods for the project.
- Had hands-on experience with large transformers and Seq2Seq models.

### ECURA AI, ANGKAS | DATA SCIENTIST INTERN

Nov 2022 – Jan 2024 | Singapore - Remote

Worked on extraction, analysis, and modeling of large time series data to understand data relations, optimize resources and make business decisions for large-scale companies.

## WORKSHOPS & ACCOMPLISHMENTS

2019	1 <sup>st</sup> place	KTHACK2020 Quantum Programming Hackaton
2020	Inzva & KUIS AI	Deep Generative Models
2019	Inzva & KUIS AI	Computer Vision for Autonomous Driving
2018	BOUN Compec	Machine Learning Workshop