# PANAGIOTIS CONSTANTINIDES

### **Electrical and Computer Engineering Student**

### **EXPERIENCE**

#### Participated in IQOQI Summer School

₩ September 2024

- Austria
- Gained a broad overview of current research in quantum information processing, in particular trapped ions, superconducting transmons and neutral atoms. Mainly attended lectures given by renowned scientists and visited state of the art labs.
- Also attended lectures discussing the theoretical research conducted in the field of quantum gravity.

#### Qiskit Global Summer School

**♀** Remote

- The event focused on several aspects essential to achieving quantum utility, making a significant reference to quantum error correction.
- I received the badge of quantum excellence for the successful completion of all graded labs.

Participated in several workshops and hacakthons in the fields of quantum computing and software engineering, mostly remotely but in-person as well.

## **ACHIEVEMENTS**

- Secured 8.8/10 GPA after my 4th year in ECE.
- Initiated TUC-QT, the local student group for quantum technologies under the IEEE TUC student branch.

### **TOOLS**

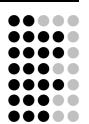
Computational physics Numerical computing

Python

C/C++ Java

Linux

Software development tools



## **SOFT SKILLS**

Self Motivated Critical Thinking Adaptability First aid training

## **LANGUAGES**

English Greek



### **EDUCATION**

Electrical and Computer Engineering Student

#### **TU Crete**

**2022 - 2027** 

#### Selected coursework

- Quantum Technologies high distinction
- Introduction to Quantum Computation high distinction
- Quantum Information and Estimation Theory
- Statistical Modeling and Pattern Recognition high distinction
- Software Development Tools and Systems Programming high distinction

#### Selected projects

- VQE Applied on Quantum Magnetism (GitHub)
- Quantum Information Processing with Trapped Ions (GitHub)
- Quantum Information Aspects of Modified Jaynes-Cummings Models (GitHub)
- Machine Learning-Guided ADAPT-VQE: Towards Problem-Agnostic Variational Quantum Simulations (in stealth mode)
- Application of the VQE on the nonlinear Schrödinger equation (in stealth mode)

### RESEARCH INTERESTS

#### **Digital Quantum simulations**

Leveraging error corrected devices to explore complex models such as chemical structures, many-body systems and nonlinear dynamics that are inherently challenging to simulate classically.

Variational quantum algorithms

Hardware efficient algorithms that enable quantum computers to solve real-world problems opening the way to quantum utility.

## **INTERESTS**

- Quantum Mechanics
- · Software engineering
- Statistical learning
- High Performance Computing
- Hiking
- Playing the piano