



Paul Uriarte Vicandi

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WORK EXPERIENCE

September 2023 – February 2024

Software Intern

SpeQtral – Space-based quantum communications (Singapore)

- Worked on developing the hardware control software for satellite operation, as well as other embedded software. Also developed a software update and deployment system robust against radiation induced data corruption.
 - Aquired Skills: C/Embedded C, C++, Bash, Docker, Git, Quantum Key Distribution

EDUCATION

September 2022 – present

Master of Science in Quantum Engineering

ETH Zürich

- Aquired skills:
 - Quantum Information / Quantum Computing
 - Quantum Optics
 - Superconducting Circuits
 - Analog Integrated Circuits
 - Computational Physics
 - Semiconductor Physics
 - Machine Learning
- Semester Project: *The effects of the conductive filament shape on resistive switching in valence change memory cells.*
 - The project involved simulating VCM devices through various methods including molecular dynamics, kinetic Monte Carlo, DFT, and quantum transport; in order to study the effect of different filament shapes on the conduction and linearity characteristics of the device.

September 2018 – December 2021

Bachelor of Science in Physics

University of California, Los Angeles

- Magna Cum Laude*
- Aquired skills:
 - Classical & Quantum Mechanics
 - Electromagnetism
 - Solid-State Physics
 - Computational Physics
 - Computer Science (C++)
 - Python (Machine Learning)

RESEARCH EXPERIENCE

August 2019 – February 2020

Undergraduate Researcher

UCLA Department of Physcis & Astronomy, Los Angeles

- Under the supervision of professor Katsushi Arisaka.
- Ariska's research focuses on how the external space is perceived by our brains, as well as developing a physical model to explain the origin of consciousness, language, and intelligence.
- My main responsibility was writing code to perform experiments and analyze data.

SKILLS

Technical skills - Programming languages:

- C
- C++
- Python
- Familiar with HTML/CSS/JavaScript/PHP/SQL

- Git

- Docker

- Problem solving

- Mathematics and Physics

Languages - Spanish – Native
- Basque – Native
- English – Fluent (C1)
- French – Basic

Other Drawing, Juggling, Chess