

ALEXANDRU ARITON

@ anduariton1234@email.com

+40 743 892 584

Bucharest Romania

alexandru-ariton

Barosandu

ACHIEVEMENTS ABOUT ME

SEEMOUS 2023: **Silver Medal**

Student National Olympiad (Traian Lalescu): **Bronze Medal**

Apple Swift Student Challenge 2022 & 2021: **Winner**

Innovation Labs: **Finalist**

Romanian National Mathematics Olympiad 2019: **4th place**

I am a university student at the Politehnica University of Bucharest. I'm passionate about Apple and Quantum Technology.

EXPERIENCE

Software Engineering Intern | **Center for Quantum Networks**

June 2023 – October 2023

Massachusetts, Remote

Collaboration between MIT, UMass Amherst, and University of Arizona

- Implemented **Double Selection Purification Circuits** in the library **QuantumSavoury.jl**
- Contributed to the purification circuits already exiting in **QuantumSavoury.jl**
- Made some visualisation tools that plots the output fidelity of both simple and double selection purification, and proves the improvement that double selection purification provides

TECH STACK

C Swift Julia C++

ObjectiveC Python

SwiftUI UIKit Metal

EDUCATION

Bachelors Degree | **University "Politehnica" Bucharest**

Oct 2022 – Present

Bucharest, Romania

- GPA: 10.00/10.00

LANGUAGES

English German | B2

COURSES

Introduction to Financial Engineering and Risk Management: **Coursera**

Term Structures and Credit Derivatives: **Coursera**

Computer Programming in Assembly: **University "Politehnica" Bucharest**

Algebra and Complex Analysis: **University "Politehnica" Bucharest**

Data Structures: **University "Politehnica" Bucharest**

PROJECTS

Tesseract4D (4D Objects) | 

June 2022

- Shows how 4D objects would look like when crossing out 3D space
- Uses **raymarching** for optimisation and provides tools like rotation and transform
- Written in **Metal**, **Swift**

Vector Phase Plotter | 

June 2021

- Plots Lorentz and Roessler vector spaces
- Plots vector spaces according to equations provided by the user
- Was used in one of my physics classes by the teacher for demonstration purposes

NoteTaker

Summer 2023 – Present

- Made a note taking app with infinite zoom using Apple technologies
- Encapsulated a function plotter that also has infinite zoom that is written in Metal