

# Paulo A. Viana

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(Last updated: November 28, 2025)

## Education

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2022-2024	<i>M.Sc. in Computer Science</i> <i>Thesis: Solving the MaxCut Problem with a Grover-based Quantum Genetic Algorithm</i>
Universidade Federal de Pernambuco	
2016-2020	<i>B.Sc. in Mathematics</i> <i>Work: Notes on Categories with a view towards Algebraic Topology</i>
Universidade Federal de Pernambuco	

## Research

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### Undergraduate Level

06/2018-06/2019	Geometrical and Topological Methods in Physics: Quantum Phases in Condensed Matter Funded by PIBIC/CNPq (Brazilian National Council for Scientific and Technological Development)
06/2017-06/2018	Phenomena and Quantum Phases in Condensed Matter Funded by PIBIC/CNPq (Brazilian National Council for Scientific and Technological Development)

### Graduate Level

06/2025-PRESENT	Post-Quantum Zero-Knowledge Cryptographic Implementations Funded by ABIN (Brazilian Intelligence Agency) & CESAR (Recife Center for Advanced Studies and Systems)
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## Work Experience

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04/2025-PRESENT	Raydian – Founder & CEO Building the first Open Quantum Marketplace
02/2023-04/2024	Accenture – Quantum Computing Analyst My work was in the company's global internal report of best results and it was presented at <a href="#">Q2B23 – Silicon Valley</a>
08/2021-10/2021	NixOS Foundation – Package Manager Participant of the 1 <sup>st</sup> <a href="#">Summer of Nix Program</a>

## Patents

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AUG 2024	Dual-Unit Quantum Genetic Algorithm (D23-387/04810-PR-US)
ACCENTURE	A novel Quantum Genetic Algorithm model that optimizes non-linear equations applied to the Oil & Gas Industry

## Relevant Courses

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FUNDAMENTAL GROUP AND COVERING SPACES — [IMPA](#), Summer Program 2019  
DATA SCIENCE CERTIFICATION — [VAI Academy](#), Aug-Oct 2022  
CRYPTOGRAPHY I — [Stanford University](#), July 2022  
VENTURE FINANCE PROGRAMME — [Saïd Business School](#), University of Oxford, Jun-Sep, 2025

# Technical Skills

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Programming Languages:	Python, Bash/shell, Haskell, Rust
Cryptography:	GPG, LUKS, ZK systems, PQC, Hyperledger Fabric
Data & ML Libraries:	PyTorch, TensorFlow, scikit-learn, Pandas
Quantum SDKs:	Qiskit, PennyLane, Cirq
Systems & DevOps:	Linux, build systems (CMake, Cargo, etc.), Git, Nix
Hardware Architecture:	RISC-V (SpacemiT M1)
Scientific Computing:	MATLAB/Octave, NumPy/SciPy
Tools & Productivity:	Vim/Neovim, Emacs, Jupyter
Markup Languages:	L <sup>A</sup> T <sub>E</sub> X, Markdown, HTML/CSS, Org-mode

# Teaching

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## Universidade Federal de Pernambuco

01/2018-02/2018	Real Analysis (Teaching Assistant) Teaching Assistant in Real Analysis during the 49 <sup>th</sup> Summer Program of the Department of Mathematics (DMAT-UFPE)
09/2024-04/2025	Post-Quantum Cryptography Lecturer in Post-Quantum Cryptography at the (LACIQ) Quantum Computing Academic League (CIn-UFPE)

# Events, Competitions, Talks and Other

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## Events

03/2024	World Youth Festival 2024 March 1-7, 2024 - Sirius Federal Territory, Russia
09/2024	Campus Party 2024 September 4-8, 2024 - Recife, Brazil
02/2025	Quantum Innovation Summit 2025 February 26-28, 2025 - Dubai, UAE
03/2025	XXIV International Scientific and Practical Conference Start to Innovate - Competiton Judge. March 28 - Moscow, Russia
05/2025	International Baking Industry Trade Fair 2025 May 18-22, 2025 - Düsseldorf, Germany
09/2025	Q2B 2025 – Paris September 24-25, 2025 - Paris, France
10/2025	TOKEN2049 – Singapore October 01-02, 2025 - Marina Bay Sands, Singapore

## Competitions

02/2024	QHack 2024 Hackathon February 8-22, 2024 - Result: Team 61/705
09/2024	Unilever 'Garagem' Hackathon Septemeber 5-7, 2024 - Result: 1st Place, Team Leader Cash Prize:\$2,800
09/2025	Q2B 2025 Paris Startup Pitch Competition September 24, 2025 - Result: Finalist, Team Leader

## Talks

10/2023	Rec n' Play 2023 Quantum and Genetics: How Quantum Computing and Genetics are related?
10/2023	Quantum Computing Academic League – UFPE Mathematical notes and implemantation of the Shor's Quantum Factoring Algorithm
06/2025	Quantum Security Defense – QSECDEF Quantum Standardisation & Quantum Certification On-Chain

## Societies, Groups and Clubs

02/2018-ACTIVE	American Mathematical Society – AMS Affiliate Member
09/2023-04/2025	Quantum Computing Academic League — UFPE Collaborator and Post-Quantum Cryptography Director
09/2024-ACTIVE	Quantum Security Defense – QSECDEF Associated Member
10/2025-ACTIVE	International Association for Cryptologic Research – IACR Associated Member

## Volunteering

08/2019-08/2019	SEMAT IV UFPE (Mathematics' Week) Volunteered to organise the event - Recife, Brazil
03/2023-07/2024	International Student Support Volunteer Volunteered to assist international students from China

## Languages

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ENGLISH:	Fluent
PORTUGUESE:	Fluent
ITALIAN:	Intermediate (CEFRL: B1)
CHINESE:	Basic (HSK 1)
LATIN:	Intermediate
RUSSIAN:	Basic (A2)
GERMAN:	Basic (CEFRL: A1)