# **CURRICULUM VITæ - JOÃO GALEGO**

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I am a certified Physics nerd and an amateur forensic scientist with a keen interest in challenging problems with real-world applications. Over the years, I've worked as a data analyst, software tester, test automation engineer, DevOps engineer and ML consultant for several companies, in areas ranging from market research to fiber optic telecommunications and mobility. Currently, I work as a DevOps engineer and ML consultant at the Siemens Lisbon Tech Hub, while pursuing a PhD degree in Cognitive Science at Universidade de Lisboa. My research focuses on the application of ML algorithms to improve the performance of EEG-based brain-computer interfaces.

#### PROFESSIONAL EXPERIENCE

Siemens 2019 – Present

DevOps Engineer / ML Consultant

- · Cloud solutions architect and administrator for 10+ applications running on AWS and Azure
- · Lead contributor to 200+ Ansible roles, Terraform modules and Docker images
- · Organized workshops and trainings on DevOps, AI/ML and quantum computing
- Performed technical assessment in 20+ interviews
- · Supervised 10+ interns and trainees
- Junior member of the IT Key Experts program (Data-driven Enterprise & Augmented Intelligence)
- SITEX class of 2021 working on Industrial Edge platforms and applications
- · Member of DI IT Architecture Guild

**Innowave** 2017 – 2019

DevOps Engineer

- · Designed and implemented test frameworks and automated tests for multiple projects and customers
- Organized internal and customer-oriented workshops and trainings on CI/CD, DevOps and test automation
- Served as technical writer and reviewer working together with software architecture teams

Coriant 2014 – 2017

Test Automation Engineer

- · Increased test automation coverage by 5-fold in less than 2 years
- Managed a Jenkins cluster with 20+ build agents

### **EDUCATION**

Universidade de Lisboa 2017 – Present

PhD Cognitive Science

- **Title:** From Thought to Action Machine Learning Techniques for Processing Electrophysiological Signals in Brain-Computer Interfaces
- Advisors: Prof. Hugo Ferreira (IBEB/FCUL), Prof. Arlindo Oliveira (INESC/IST)
- Keywords: brain-computer interfaces, EEG, biosignal processing, riemannian classification, deep learning

#### Instituto Superior de Ciências Sociais e Políticas

2016 - 2017

PgD Forensic Studies

### Instituto Superior Técnico

2008 - 2013

MSc Physics

- Title: Flavour Aspects of Multi-Higgs Models | Grade: 19/20
- Advisors: Prof. Gustavo Castelo Branco (CFTP/IST)
- Keywords: standard model, CP violation, discrete groups, flavour symmetries, multi-Higgs doublet models









## **Al Product Manager Nanodegree**

2021

Udacity

Course organized in collaboration with Appen on how to develop AI products that deliver business value.

### **Self-Driving Car Engineer Nanodegree**

2021

Udacity

Autonomous driving course organized in collaboration with Waymo and Mercedes-Benz covering several topics in computer vision, sensor fusion, localization, path planning, control and systems integration.

### **AWS Certified Machine Learning - Specialty**

2020

Amazon

Specialty exam to assess the candidate's ability to design, implement, deploy, and maintain ML solutions.

## **Fundamentals of Digital Marketing**

2020

Google

Free digital marketing course accredited by Interactive Advertising Bureau Europe and The Open University

## **Microsoft Certified Azure Fundamentals (AZ-900)**

2020

Microsoft

Azure certification covering fundamental cloud concepts, Azure services, Azure workloads, security and privacy in Azure, as well as Azure pricing and support.

## **Associate Android Developer**

2018

Google

Entry-level exam that includes a coding project and exit interview, covering topics related to app functionality, UI and data management, as well as debugging and testing of Android apps.

#### **Certified Jenkins Engineer**

2016

Cloudbees

Official certification covering core Jenkins concepts, Pipeline and Jenkins administration fundamentals.

Machine Learning 2014

Coursera

Introductory MOOC on machine learning taught by Andrew Ng.

#### TECHNICAL SKILLS

Cloud Platforms: AWS, Azure, Google Cloud

Programming Languages: C/C++, Go, Java, MATLAB, Python, Ruby

**Tools**: Ansible, Docker, Packer, Terraform

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## **IBM QGSS21 Certificate of Quantum Excellence**

2021

IBM

Two-week intensive quantum computing summer school organized by the IBM Qiskit team with a focus on quantum machine learning. Quantum excellence certificates were issued to those who completed *all* graded lab work assignments with a final cumulative score above 75%.

For more information, check out the official announcement on the IBM research blog

## IBM Quantum Challenge - Advanced, 1st Place

2021

IBM

Quantum computing hackathon organized by IBM to celebrate the 40-year anniversary of the *Physics of Computation* conference, and 5-year anniversary of IBM Quantum.

Exercises included factoring small integers with Shor's algorithm, running spectroscopy experiments against real IBM Quantum systems (w/ exclusive access to the brand new IBMQ Jakarta) using Qiskit Pulse and determining the ground state energy of small molecules (H<sub>2</sub>, LiH) using VQE

For more information, check out the official announcement on the IBM research blog

## **Udacity Technology Scholarship - AI Track**

2021

Udacity / Bertelsmann

Full scholarship to attend Udacity's AI Product Manager nanodegree

#### QHack 2021 QML Challenge - Top 50

2021

Xanadu / AWS

Quantum machine learning hackathon hosted by AWS and Xanadu

For more information, read my QHack Recap - PennyLane, Amazon Braket and Beyond article on Medium

### SITEX 2021 - Industrial Edge, 1st Place

2021

Siemens

Bring simulation (Tecnomatix® PlantSim) and optimization (Simcenter HEEDS) to the factory floor and low code platforms (Mendix) to the Industrial Edge landscape as part of a strategic development program for the innovation and technology community in the Siemens hemisphere.

### Al@Sustainability Hackathon - Technical Excellence (Team Mobility)

2020

Siemens

Built an application in collaboration with Swiss Federal Railways (SBB) and based on Amazon SageMaker to predict the traffic volume and modal split for a specific weather constellation and time based on a large set of real-world data points.

### Associate Android Developer Fast Track Program Scholarship

2016

Google / Udacity

Full scholarship to attend Udacity's fast track course and take the Associate Android Developer exam

### Junior Research Scholarship

2013

Fundação para a Ciência e Tecnologia (FCT)

Scholarship for undergraduate students to work at the Center for Theoretical Particle Physics (CFTP)

#### **LANGUAGES**

Deutsch (elementary proficiency), English (full professional proficiency), Español (professional working proficiency), Français (professional working proficiency), Italiano (elementary proficiency), Português (native)