# **DIOGO SANTOS**

#### ABOUT ME

Final year Computer Science and Engineering student from Instituto Superior Técnico, specializing on distributed systems. Working on my master's thesis about BFT consensus algorithms and Ethereum's distributed validator technology, merging academic theory with cutting-edge tech.

#### PROFESSIONAL EXPERIENCE

### First Stage Researcher

May 2024 - Jul 2024

Lisbon, Portugal

INESC-ID

Tech Stack: Golang + Docker

• Implemented an asynchronous BFT protocol (AleaBFT) to improve the reliability of Charon, a distributed validator client for Ethereum from Obol

# Full Stack Developer - Research Initiation Grant

Sep 2022 - Apr 2024

Instituto Superior Técnico (IST) - Department of Computer Science and Engineering

Lisbon, Portugal

Tech Stack: Vue.js (Typescript) + Spring Boot (Java) + MariaDB + Docker

• Developed an application that automates and streamlines the dissertation defense scheduling process, reducing reliance on manual labor.

### Software Engineer Intern

Jul 2023 - Aug 2023

Jungle AI

Lisbon, Portugal

Tech Stack: Python + AWS (S3 and SQS) + Kubernetes

• Developed a parallel data processing workflow utilizing the Ray framework alongside AWS services such as S3 and SQS and deployed it on Kubernetes.

## **Outsourcing Consultant**

Out 2021 - Mar 2022

JUNITEC and PSK Analytics

Lisbon, Portugal

Tech Stack: React.js (Javascript) + Flutter + AWS (Amplify)

• Built a mobile app for sport data collection which enables football players to track their progress and improve on multiple skills such as dribble, vertical jump, etc. Developed a back office for data and account management.

### Front-End Developer Intern

Jul 2021 - Sep 2021

Spin.Works

Lisbon, Portugal

Tech Stack: Angular.js (Javascript) + Mapbox GL JS

- Built a PWA prototype to expand the company's product usage to mobile applications providing customers with specific tools to aid precision farming.
- Worked with GPS data, geographical data (GeoJSON) and the Mapbox library for map visualization.

#### **EDUCATION**

Master of Computer Science and Engineering, Instituto Superior Técnico

2022 - Expected Nov 2024

GPA: 18/20 — Academic Merit Diploma (2022/2023)

Bachelor of Computer Science and Engineering, Instituto Superior Técnico GPA: 17/20 — Academic Merit Diploma (2019/2020, 2020/2021, 2021/2022)

2019 - 2022

### PERSONAL PROJECTS

**Nvolopi** Developed a microservices based file transfer system that allows users to upload files and share them with other users. Built with React.js, Express.js and MongoDB. Deployed on GCP as a Kuberbetes cluster with automatic pod and node scaling using Terraform. Monitored with Istio's service mesh, Prometheus and Grafana. Link.