# **DIOGO SANTOS**

#### ABOUT ME

Fifth-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. Beyond coding, I love gym workouts and bouldering, where problem-solving meets physical challenge.

#### PROFESSIONAL EXPERIENCE

Software Engineer

Set 2022 - Today

Instituto Superior Técnico - Departamento de Engenharia Informática

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.
- Helped department employees with technical support (computers, printers, etc).

## Software Engineering Intern

Jul 2023 - Aug 2023

Jungle AI Tech Stack: Python + AWS (S3 and SQS) + Kubernetes Lisbon, Portugal

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

## **Outsourcing Consultant**

Out 2021 - Mar 2022

Lisbon, Portugal

JUNITEC and PSK Analytics

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, stamina, etc.
- Developed a back office for data and account management.

#### Front-End Developer Intern

Jul 2021 - Set 2021

Spin.Works

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

Lisbon, Portugal

- 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 2024

GPA: 18/20

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.

**EcoWorld** Developed a load balancer and auto-scaler service to support EcoWorld workload hosted on AWS (Lambda and EC2). Instrumentalized the set of services running the workload to estimate each request cost based on instruction count for a load balancing algorithm and measured EC2 CPU utilization for an auto-scaling algorithm. Link.