# **AFONSO JORGE RAMOS**

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### **EXPERIENCE**

### Software Engineer

#### **eDreams**

🛗 August 2021 - Present

Remote / Porto, Portugal

- Started the decoupling of the Search Engine from the ageing monolith, requiring constant refactoring, code analysis and deprecation, while maintaining a very strict API contract which is used by hundreds of clients, including Google Flights, Kayak, eDreams main website, among others, reaching around 55k requests per minute. This required proficiency with Java and Java versions interoperability.
- Migrated missing modules to **kubernetes** on GCP cloud to enable better **scaling** and achieve **higher cost-efficiency**.
- Dynamised the new Porto office, as part of the Core Porto team, to establish a
  good company environment, cohesion, trust and humanity, by organising gatherings, feedback sessions, empowering diversity of talent, and other team building
  and collaboration activities.
- Part of a joint-team effort to integrate a new API provider in eDreams.

### Junior Software Engineer

### Hostelworld

M October 2020 - July 2021

- Remote / Porto, Portugal
- Development of the Experiences Web App in Next.JS (React Framework) and Architectural Design of an Elasticsearch solution adapted to it. This project was developed from the ground up in NodeJS, TypeScript, Express, and Jest.
- Partook in the development effort of the shift to **OpenID Connect** Authentication across all Hostelworld services after creating a Proof of Concept.
- Lead the development of the integration of a new API provider into our Experiences marketplace.

# Software Engineer - Summer Internship

### Hostelworld

🛗 July 2019 - September 2019

- Porto, Portugal
- Researcher and Developer of an innovative implementation of the Hostelworld's services within Google Assistant and Amazon's Alexa.
- Developer in an agile team responsible for revamping of the Hostelworld's API
  with a well-planned micro-service architecture in NodeJs with TypeScript, NestJs,
  Jest and GraphQL with a strong emphasis on functional programming, increasing
  performance up to tenfold.

# Software Engineer - INESC-TEC Researcher

### Institute for Systems and Computer Engineering, Technology and Science

- Porto, Portugal
- Researcher and Developer of a Kahoot alternative in C#, at the time, a new programming language to me, while using Google APIs and Office APIs, integrating Google Forms live responses with lightning-fast updates within Microsoft Power-Point to be used throughout the University of Porto.
- Lead a development team, and partook in the development, of a new CMS platform for the VCMI and Medical Research groups using Django and Wagtail in Python, creating flexibility with automated publishing, publications fetching, SEO, with a fast RESTful API, among other features requested by the client.

## **ACHIEVEMENTS**



### Vice-Chair IEEE UP

Elected as Vice Chair due to my resilience, participation and social skills.



### **Seasoned Workshop Lecturer**

Workshops' organisation, structure and content have created a high level of popularity among students.



### **ACM Student Chapter Founder**

Founded an ACM Chapter within our University.



### **Published Paper**

Automatic Program Repair as Semantic Suggestions: An Empirical Study

# **FRAMEWORKS**



# **LANGUAGES**

Portuguese

**English** 

Cambridge English: First (FCE), Advanced (CAE) and Proficiency (CPE) Certificates

Spanish French German



# **EDUCATION**

# Master in Informatics and Computing Engineering Faculty of Engineering of the University of Porto

- **ERASMUS** in the *Informatics Faculty of Barcelona at Universitat Politècnica de Catalunya* embarking on a journey of self-confidence, intercultural understanding and maturity in one of the best Computer Science universities in Europe, to explore new opportunities and challenges with the help of an always moving, non-stop, city.
- Teacher at Code Move Portugal, to encourage and empower children to learn and gain interest in computer science.
- Speaker at Talk a Bit 2018 and 2019, a conference with over 500 participants to talk about technological projects with a social impact.
- Invited Student to showcase some of my distinguished projects in Engineer Profession Week and UP Showcase, events created by the University to showcase its best projects to High-School students.
- CEO at Feeka, a student-led organisation created to take ownership of 4 technology consulting projects for 4 different companies. I was responsible for leading around 50 people from different backgrounds across these 4 projects that had different needs across several environments.
- In addition to the CEO position, I also held a developer position, like other CS Students, and partook in the development of an Angular component capable of communicating with a C# server capable of identifying failures in the assembly line using machine learning, achieving turn-key integration of Critical Manufacturing's production needs improving production failure detection and facilitating user interaction.

# **PROJECTS**

- Created parrot, a hassle-free, highly performant, Discord music bot built with Serenity in Rust, powered by yt-dlp.
- Joined Spicetify's core development team, a project that aims to provide a CLI to customise Spotify's client with custom themes and extra features on Windows, MacOS and Linux. Also provided the community with a documentation website.
- Created Discrakt a Discord Rich Presence to share with friends what shows/movies you are watching on any platform.
- Created a new game development for beginners learning experience with FEUP-8, an all-in-one game development platform based on TIC-80, capable of having tutorials, exercises and automated evaluation of said exercises with fix suggestions, interactively teaching young children the basics of game development. The application, developed in C, communicated with the Teacher Platform, developed with PHP's Laravel as a Backend, with hands-on experience on a narrow time-schedule in a cooperative Agile team using unit tests, CI/CD, automation and containerisation.

# STUDENT ASSOCIATIONS

### Member & 2019 Vice-Chair

### **IEEE University of Porto & IEEE Computer Society**

## February 2017 - 2021

- Porto, Portugal
- Workshop creator and lecturer for several topics, ranging from JavaScript, LaTeX, C++, Game Development, Java, Docker and, my last one, Golang.
- Part of the Sponsors team of ENEI 2018 (National Informatics Engineers Meeting), and elected Head of Sponsors in the organisation of SYP Congress 2018.
- Founder and Chair of Retro Jam, a yearly retro-games development 36-hour competition, which is already on its fourth edition.
- Due to my high participation, self-confidence and initiative within IEEE University
  of Porto I was nominated Vice Chair for the year of 2018/2019, as well as Treasurer of the Computer Society Chapter.
- Women in Engineering member and advocate, to promote the presence, diversity and inclusion of Women in the technology sector in Portugal, participating in/organising several programmes and events.
- Amid COVID-19, introduced Jupyter Notebook Remote Workshops, enabling attendees to learn by themselves while having all the necessary tools and content.

# **VOLUNTEERING**

### Teacher

#### **Ensico**

## 2021 - Present

Porto, Portugal

I have always had a passion to educate, and with this initiative I was able to give workshops to help primary-school students the ability to envision, design and develop simple software solutions, creating an excellent entry point into the technology world.

### Teacher

### **Coding for Social Impact**

**2017 - 2019** 

Porto, Portugal

I have always had a passion to educate, and with this initiative I was able to give workshops to help primary-school students the ability to envision, design and develop simple software solutions, creating an excellent entry point into the technology world.

# Teaching Professor In Jr. University University of Porto

**2017 - 2019** 

Porto, Portugal

Creator and Teacher of a new programming course at Junior University tailored to teach high-school students how to code a fully-featured 8-bit video game in one day. On subsequent years, I led the team behind the next editions, improving activities from suggestions and in-house ideas. This course is still active to this day, however I no long help with its coordination.

### FEUP Buddy

### Faculty of Engineering, University of Porto

**2016 - 2019** 

Porto, Portugal

Programme to welcome Erasmus students, while gathering experience in highly multicultural environments.