

# 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**.
- Moved modules to 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.

### Junior Software Engineer

#### Hostelworld

October 2020 – July 2021

Remote / Porto, Portugal

- Backend Development** of the **Experiences Web App** and **Architectural Design** of an Elasticsearch solution adapted to it. This project was developed from the ground up in NodeJS, TypeScript, Express, and Jest, with Jenkins pipelines. Also helped with **Frontend Development** when needed using NextJS.
- Lead 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

September 2018 – July 2019

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 PowerPoint 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

## STRENGTHS

Confident Quick learner Candid  
Duteous Organised Accomplisher  
Proactive Listener Responsible  
Efficient Resilient Creative  
Energetic Versatile Open-Minded

## FRAMEWORKS

django Vue Nuxt Angular  
React Next Gatsby Laravel  
Tailwind Stencil NodeJS NestJS  
Flask Redis Kafka Android  
Mocha Jest scikit RapidMiner  
Tensorflow Dialogflow JVM  
PostgreSQL MariaDB NoSQL  
Redis Docker GCP Azure  
AWS Jenkins Actions TravisCI

## 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

📅 September 2015 – September 2020 📍 Porto, Portugal

- **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.

## PROJECTS

- **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.
- **Chief Executive Officer** at Feeka, a student-led organisation created to take ownership of 4 technology consulting projects for 4 different companies. As a CEO, I was responsible for leading around 50 people from different backgrounds across these 4 projects that are now deployed 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.

## STUDENT ASSOCIATIONS

### Member & 2019 Vice-Chair

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

📅 February 2017 – Ongoing 📍 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 \(National Informatics Engineers Meeting\)](#), a yearly Congress that aims to gather all Portuguese Informatics students, which, at the time, helped me learn some problem solving skills, in addition to how to work well under pressure. Due to my performance, I was elected Head of Sponsors in the organisation of [SYP Congress 2018](#).
- **Lecturer** at Teacher In Service Program, which aims to help High-School students to develop a taste for engineering as well as programming.
- 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

3x Google Hashcode-Porto Hub

2x Global Game Jam-Porto Hub

ICPC 2019-Tech Team Leader

ENEI 2018-Sponsors

Commit Porto

XP Conference-Logistics

SYP Conference-Head of Sponsors

### 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 longer help with its coordination.

### FEUP Buddy

#### Faculty of Engineering, University of Porto

📅 2016 – Ongoing 📍 Porto, Portugal

[Programme](#) to welcome Erasmus students, while gathering experience in highly multicultural environments.

## CONF / COMPETITIONS

3x Google Hashcode

2x Global Game Jam

3x Advent of Code

Legal Hackathon

Bit Hackathon

4x WebSummit

Open Source Summit Europe

EIT Digital Hackathon

Hack4Good