Pedro Mela

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WORK EXPERIENCE

01/01/2023 – CURRENT Portugal
SOFTWARE ENGINEER READYEDUCATION

Ready Education empowers institutions worldwide to build and engage their campus community, improving communications and experiences that increase retention and drive student success. My responsabilities are:
- Design, develop, and maintain object-oriented, multi-tiered ASP.NET CampusGroups applications
- Support the development and operations of .NET (C# and VB.NET) based applications and components as part of an extensive enterprise website system with domestic and international users.
- Development of web services and the use of JSON technologies.
- As an agile team, we have our daily, retrospectives, and refinement meetings(the team is spread globally), using Jira and other tools.

Technologies: C#, Visual Basic, .NET, ASP.NET, Javascript, HTML, CSS, MySQL, Jira, Github, Git

Business or Sector Education | **Website** https://www.readyeducation.com/en/

30/09/2021 – 01/12/2022 Portugal
SOFTWARE ENGINEER OUTSYSTEMS

Outsystems is a unicorn company which is a leader on The Gartner® Magic Quadrant™ for Enterprise Low-Code Application Platforms and other quadrants in previous years too.

As Software Engineer on Outsystems, I help the team to create and improve existing features on our low-code platform, so that our customers can create robust solutions quickly.

I'm a member of the Product Growth team that conducts experiments on our platform (A/B testing). We create new features and analyze the results to understand if they were beneficial to the users, and the relation to our most important metrics. The main goal of these features/experiments is to convert free users into clients. Our team also delivers new features and fixes existing problems focusing on removing known friction points on the product.

As an agile team, we have our daily, retrospectives, and refinement meetings all conducted in English (since the team is spread globally), using Jira, Miro, Figma, and other tools.

On the coding part, we use C#, WPF, Typescript and React on a daily basis, and also write/change React unit tests and C# tests for each task that one gets, guaranteeing software quality on pull requests at GitHub.

This a never ending job as we are constantly testing new features on the market.
I've taken, for instance, the Standard Edition Trial initiative which involves enabling the user the access a set of functionalities after accepting the trial while using telemetry/statistics to determine the value of the feature.

Technologies: OutSystems, C#, .NET, WPF, React, Typescript, Javascript, HTML, CSS, Snowflake, Jira, Github, Miro, Figma, Git

Website https://www.outsystems.com/

31/01/2021 – 29/09/2021 Lisbon, Portugal
SOFTWARE DEVELOPER FINANTIA BANK

Development of backend services in C# .NET and frontend internal applications in Angular.

The website developed is a management application
that provide functionalities like creating a new client profile or check
the portfolio evolution of a client.

Refactored most of the project to an actual standard using the Redux pattern. Also, refactored most of the
components from Template Driven to Reactive Forms.

Technologies: C# .NET, Angular, JavaScript, TypeScript, TFS, SQL

Business or Sector Financial and insurance activities | **Website** https://www.finantia.com/en

07/07/2019 – 28/01/2021
SOFTWARE ENGINEER SIHOT

- Devise hotel management software with modules such as booking, staff administration, generation
  of reports and much more.
- Revise, modularize and update old code bases to modern development standards, reducing
  operating costs and improving functionality.
- Fully remote work.
- International context.
- Daily usage of English in Kanban meetings.
- Implemented screens and associated server logic on a proprietary framework.

Technologies and Tools: C++, C#, .NET, Visual Studio, Git

Website www.sihot.com

31/08/2018 – 02/07/2019 Lisbon, Portugal
INTEGRATION ENGINEER COLLAB

Collab is a software house that created a contact center solution, OneContact.
As an Integration engineer, I developed and implemented solutions that coordinate applications across the
enterprise or its units and departments. Evaluate existing components or systems to determine integration
requirements and ensure that the final solutions meet organizational needs. Reused components when
possible and assisted management in making decisions.
Consisting of more than 10 members, this team's focus is to create product integrations and implement the
IRV(Interactive voice response) logic. One example of a common integration would be to identify a user
through his social number while the user is talking with the IVR. The user would introduce his social
number and an API call is made to identify the user.
We had clients from all around the world from many different areas, like Electricity providers, Internet
providers, Banks, etc...

- Worked with clients to find optimal solutions for their problems.
- Worked closely with software development and testing team members to design and develop robust
    solutions to meet client requirements.
- Implemented IVR workflows using the company's framework using C#.
- Developed integration APIs (C# .NET) to retrieve/insert customer-related data. These APIs feed the
    IVRs.
- Implemented IVR workflows of variable complexity and all the integrations/APIs involved.

Technologies: C#, .NET, SQL Server, JavaScript, HTML, CSS, Git

Website www.collab.com

EDUCATION AND TRAINING

12/09/2013 – 07/2018 Lisboa, Portugal
BSC IN COMPUTER SCIENCE AND ENGINEERING University of Lisbon - Instituto Superior Técnico
(Alameda)

Strong practice during the course.

Main disciplines: Database, Object Programming, Operating Systems, Computer Networks, Software Engineering, Artificial Intelligence, Distributed Systems, Computer Graphics, Compilers.

Level in EQF EQF level 6

● LANGUAGE SKILLS

Mother tongue(s):   **PORTUGUESE**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C2	C1	C1	C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● ADDITIONAL INFORMATION

TECHNICAL SKILLS

Programming languages / Frameworks

- C++
- C#
- VB
- .NET
- SQL
- Java
- Angular
- React
- TypeScript
- JavaScript
- HTML
- CSS

Operating Systems

- Windows
- Linux

Database Management Systems

- PostgreSQL
- MySQL
- SQL Server

IDE's

- Microsoft Visual Studio
- Eclipse
- Unity

Version control tools

- GIT
- CVS
- SVN

SOME ACADEMIC PROJECTS

Some Academic Projects

Fantasy Shooter

Scope: Develop 3D Game in Unity and C #, The game consists of a fisrt person shooter that instead of using guns uses spells.
Responsibilities: Implement mechanics like, walk, run, jump, attack, pick up weapon, etc ... Create controllers for the characters. Lava shader. The spells were created from a library for this purpose.

link from youtube: https://www.youtube.com/watch?v=AzSag6lIKGQ

Distributed systems - GIRA

Scope: Develop back-end system similar to the new bicycle management system in Lisbon, Gira.
Technologies: Java, Maven, Git, Eclipse, JAX-WS, JAX-R, UDDI naming.
Responsibilities: In the first phase of the project, develop classes corresponding to the stations, where is possible to deliver and lift bikes, where user personal information such as name and points are stored. Each station stores its users. In the 2nd phase, make the user information distributed acquiring fault tolerance, for this it is used the Quorum Consensus, which, in short, is an algorithm that awaits a set of affirmative answers, usually (n + 1)/2 being n the number of stations, to be able to write or read in the respective stations thus tolerating (n + 1/)2 faults. In the third phase, implement security mechanisms on the SOAP messages transmitted. Kerberos was used for authentication and generating the session key generation used to generate Message Authentication Code (MAC).

Distributed Application Development - Pacman online

Scope: Develop client-side, server-side and a manager of all applications able, for example, to introduce delays between two applications. Server with fault tolerance.
Technologies: C #, .NET, Microsoft Visual Studio
Responsibilities: Develop player chat. Develop application manager. For fault tolerance, active replication was used, if the server was down, the new server was chosen through Paxos Consensus, which continues to transparently process the game.

Compilers - GR8

Scope: Develop a compiler in a Linux environment. The language GR8 (great) to be compiled was specified by our teacher and the design pattern to be used at Nodes (C++ classes representing language concepts, while e .g) was Visitor. Using the Visitor pattern there were two modes available, xml (mainly to debug) and assembly. We used Flex to scan(lexical analysis), Byacc to parse(syntactical analysis) and C++ and library's to semantic analysis and code generation, meaning that given a file.gr8 first we check if the symbols are all valid, second check if the grammar is ok and third given the syntactical tree created at byacc phase generate the xml or assembly.
Technologies: Flex, Byacc, C++, CDK and RTS (C++ prof lib)