

# Pedro Ferreira

<https://pedrojferreira.com/>

Software Engineer with 9+ years of experience

Contact : [hello@pedrojferreira.com](mailto:hello@pedrojferreira.com)

## SKILLS

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- **Programming:** Python, SQL, .NET Framework, Java, Javascript, Spring Framework, JSF Framework
- **Cloud:** Google Cloud, Microsoft Azure
- **Databases:** Microsoft SQL Server, PostgreSQL, Oracle
- **Data Engineering:** Apache Airflow, dbt, Metabase, Apache Superset, Apache Kafka
- **Tools:** VSCode, SourceTree, Azure Data Studio, Azure Storage Explorer, MobaXterm
- **DevOps:** Git, Docker, Jenkins, Azure DevOps

## EXPERIENCE

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- **zkipster AG** remote — Zurich, Switzerland  
*June 2023 - Present*
  - **Senior Backend Engineer:** Implement features on the event management product using Microsoft stack.
- **NTT DATA Portugal** Lisbon, Portugal  
*Nov 2016 - May 2023*
  - **Team Leader/Developer — Hiscox France:** Implementing an Microsoft Outlook 365 add-in based on Microsoft Azure (Azure APIM and Azure AD) to support French Hiscox business.
  - **Team Leader/Developer — ehCOS EHR:** Designing and implementation of a new Java (with Spring) based EHR system for a private health company in Portugal. My role in this project was Team Leader while also being responsible with the data modelling design, implementation of the hospital's pharmacy and nursing circuit, assuring the quality of code and the completion of tasks within the estimated times.
  - **Team Leader/Developer — ehCOS MPI:** Implementation of a product which aims to centralise a patient's information across the entire healthcare group, regardless of the healthcare unit of choice. This project is based on the HL7 health standard (v2 and FIHR) and communicates via Java REST and SOAP services. Patient validation mechanisms are also used through specific algorithms, which run on an Oracle SQL database
  - **Team Leader/Developer — CCI – Inpatient Customer Circuit:** Solution design and respective data modeling on a Postgres DB. The system's purpose is to implement a workflow for managing and monitoring the cycle of a patient/client from the moment they are admitted to a health unit for a surgical intervention until their departure, thus involving the monitoring, billing and financial entities.
  - **Developer — SSTAT – Work Accident Management Application:** Implementation of a Java (JSF with Primefaces) web solution to manage work accident alerts.
  - **Developer — IAPMEI - Agency for Competitiveness and Innovation, I.P.:** Design the data model and implementation of a portal for the management and processing of industrial licensing applications using Microsoft asp.NET MVC, SQL Server, Entity Framework, Bootstrap, JQuery, REST WebServices technologies and WebAPI. Installation and configuration of services in IIS on Windows Server 2016 via Azure as well as development of Stored Procedures (SQL SERVER) and ETL processes to perform data migration between the old and new systems that were developed.
  - **Developer — SOSHST - Health, Hygiene and Safety at Work Application:** Help in the development of a Java (JSF) web application (based on several portals) to manage clinics and laboratories.
  - **Developer — eSPap - Public Administration Shared Services Entity, I.P.:** Corrective and evolutionary maintenance of this entity's portals, namely, Suppliers Portal, Human Resources Management Solution and Financial Resources Management using SQL Server, .NET Framework and Sharepoint 2016.
- **Accenture Portugal** Lisbon, Portugal  
*Jul 2013 - Oct 2016*
  - **Developer — ANSR – National Road Safety Authority:** Assistance in the initial analysis and requirements, as well as responsible for the development of a Java (JSF with Primefaces) web platform for the registration and maintenance of administrative offence records and consequent administrative processes regarding the evolution of the status of those records. Creation and deployment of web-services for interaction with other existing applications and database model design .

- **Developer — ANSR – National Road Safety Authority:** Implementation of a public infractions portal that allowed a user to check their infractions and the respective payments, using Microsoft SQL Server, .NET Framework and Sharepoint 2013.
- **Developer — I.P. - Social Security:** Implementation of a new Java Spring web solution with the aim of automating tasks performed daily by Social Security employees. In addition to create the interface, this automation involved the design of data model, creation of jobs and web-services for processing data.
- **Developer — AT – Tax Authority:** Implementation of new functionalities in existing Java based systems. Involvement in their maintenance and resolution of reported anomalies.

## EDUCATION

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- **Instituto Politécnico de Leiria - Escola Superior de Tecnologia e Gestão** Leiria, Portugal  
*Master's Degree in Computer Science - Mobile Computing; 17/20* *Sep. 2012 – May. 2015*
- **Instituto Politécnico de Leiria - Escola Superior de Tecnologia e Gestão** Leiria, Portugal  
*Undergraduate Degree in Computer Science - Information and Communication Technology; 13/20* *Sep. 2008 – July. 2012*

## PERSONAL PROJECTS

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- **F1 Data Pipeline:** ELT Pipeline to Extract, Load and Transform F1 Data using Kaggle API, Docker, Python, GCP Cloud Storage, GCP BigQuery and Metabase
- **Twitter Real Time Word Processing:** Streaming words from Twitter using Tweepy library, applying Apache Spark (PySpark) to process those words and Metabase to display the information.
- **Web Scraping - Portuguese Parliament Voting:** Scraping data from portuguese parliament with the Python library, BeautifulSoup. Load the votation documents to Azure Storage Account and then processing it with a help of a Postgres SP (on a Azure Postgres Database (with Flexible Servers)). The displaying results were built on an Apache Superset dashboard.
- **ETL Pipeline with Azure Data Factory and Azure Databricks:** Cloud ETL Pipeline with Azure Data Factory and Azure Databricks to process CSV files of global emissions and the planet temperature along the years.

## CERTIFICATIONS

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- Microsoft Azure Data Fundamentals (DP-900) (2023)
- Google Cloud - Associate Cloud Engineer (2022)
- Microsoft Azure Fundamentals (AZ-900) (2022)
- Data Engineering, Big Data, and Machine Learning on GCP - Google Cloud (via Coursera) (2022)
- Big Data Specialization - University Of California San Diego (Via Coursera) (2021)
- Six Sigma Yellow Belt Professional (2020)
- Professional Scrum Master I (2019)
- Liferay Digital Experience Platform 7.0 (2018)
- Cisco CCNA Security (2011)
- Cisco CCNA Exploration IV: Accessing the WAN (2011)
- Cisco CCNA Exploration III: LAN Switching and Wireless (2011)
- Cisco CCNA Exploration II: Routing Protocols and Concepts (2011)
- Cisco CCNA Exploration I: Network Fundamentals (2011)

## LANGUAGES

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- Portuguese (Native)
- Spanish (Full Professional Proficiency)
- English (Professional Working Proficiency)