JOÃO LUCAS PIRES

Full-Stack Software Engineer
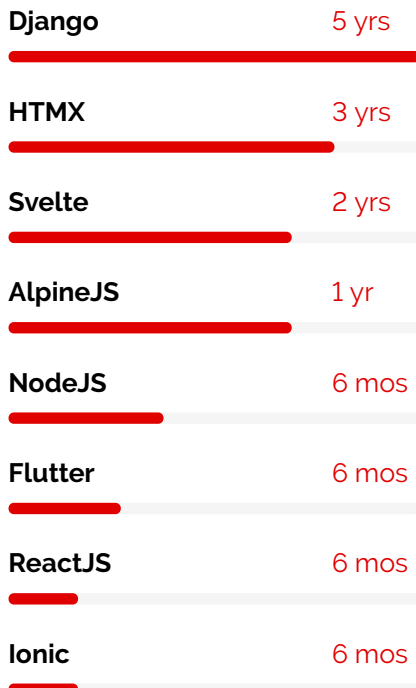
CONTACT

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SKILLS

FRAMEWORKS

Django	5 yrs
HTMX	3 yrs
Svelte	2 yrs
AlpineJS	1 yr
NodeJS	6 mos
Flutter	6 mos
ReactJS	6 mos
Ionic	6 mos

LANGUAGES

Python	5 yrs
Javascript	5 yrs

PROFILE

I'm currently working at Checksec developing and maintaining applications using Django, DRF and HTMX. I also specialize in migrating existing SPA applications to HDA applications using HTMX and AlpineJS. I've worked before at companies such as AdEvolutio (4 yrs) and at PlatformE (2 mos) totaling now more than 5 years of experience. I also hold a Master's Degree in Networks & Computer Engineering from the Faculty of Sciences at the University of Porto.

In addition, I actively manage several freelance projects that I have conceptualized, developed, and deployed from the ground up. Some noteworthy projects include a driving school management software and a car washing booking service.

My primary work focus is on Django, but I also have substantial experience with front-end frameworks such as Svelte, HTMX, and have worked in the past with ReactJS and Flutter.

My specialization is in the creation of HDA (Hypermedia Driven Applications), back-office interfaces, and integration with Web Components.

Furthermore, I possess valuable expertise in API design, mobile app development and DevOps engineering.

WORK EXPERIENCE

Full-Stack Engineer
CheckSec
2024 - 2025

Currently helping maintaining existing products while migrating others from a traditional SPA approach to an HDA architecture.

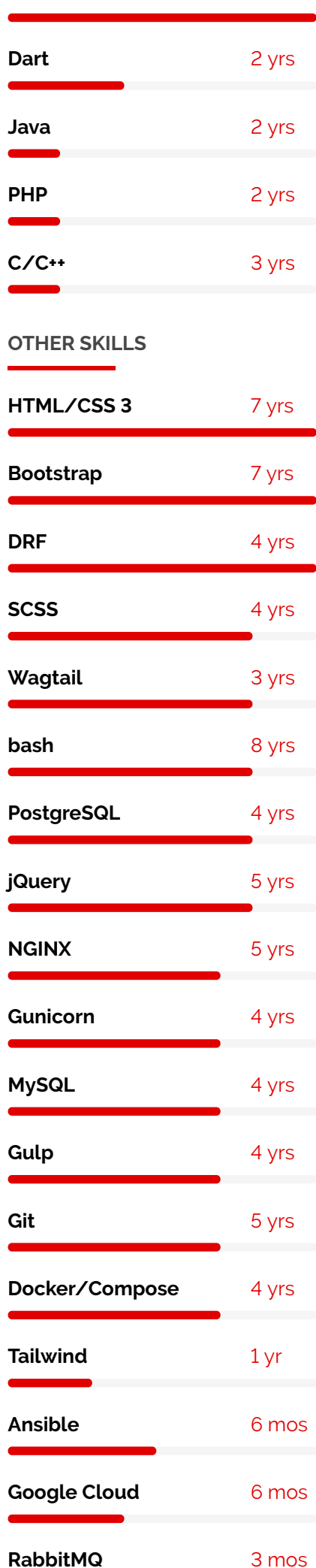**Full-Stack Engineer**
PlatformE
2024 (2 mos.)

General bugfixing, new feature implementation and HDA development consulting.

Full-Stack Engineer/DevOps
AdEvolutio
2020 - 2024

Developed a large array of projects internally and for various clients, with a focus in housing market statistics, geo-spatial components and management interfaces. My specialization ended up being in backoffice interfaces.

- Developed the front-end interface for a web application that handles real estate construction expenses using ReactJS (later refactored to Django). Link

Skills

Skill	Experience
Dart	2 yrs
Java	2 yrs
PHP	2 yrs
C/C++	3 yrs

OTHER SKILLS

Skill	Experience
HTML/CSS 3	7 yrs
Bootstrap	7 yrs
DRF	4 yrs
SCSS	4 yrs
Wagtail	3 yrs
bash	8 yrs
PostgreSQL	4 yrs
jQuery	5 yrs
NGINX	5 yrs
Gunicorn	4 yrs
MySQL	4 yrs
Gulp	4 yrs
Git	5 yrs
Docker/Compose	4 yrs
Tailwind	1 yr
Ansible	6 mos
Google Cloud	6 mos
RabbitMQ	3 mos

- Created a website with an online store for automotive services using Django. Link
- Collaborated on the development of an online news website with a Content Management System powered by Django and Wagtail. Link
- Contributed to another online news website with a Content Management System built on Django and Wagtail. Link
- Developed a web component for dynamic object filtering using Svelte as part of a project for the University of Porto.
- Designed a web component enabling the creation of dynamic forms with visual manipulation using Svelte in a project for the University of Porto.
- Built a Python package for Django that facilitates the creation of wizard-like and generic form views. Link
- Developed a Python package for Django to create automated AJAX Table/List views. Link
- Contributed to the open-source Pretalx interface by translating it into Portuguese. Link
- Worked on a Continuous Education portal with a back-office interface for management using Django as part of a project for the University of Porto.
- Contributed to an Events website with a back-office interface for management using Django in another project for the University of Porto.
- Enhanced a variation of an Events website with a back-office interface for management, incorporating more advanced interfaces using Django and HTMX. Link
- Developed a formations website for selling videos with a back-office for management using Django and HTMX. Link
- Engaged in the development of a microservices-like system utilizing the CQRS pattern to share news articles between a master node and various specific news sites using Django.
- Built a back-office interface for the master node using Django, HTMX and Svelte.
- Prototyped a package for building HTMX-based back-office interfaces from a single register class using Django/HTMX in an internal project.
- Created a plugin for Pretix to automate order generation from a list of email addresses using Django and Pretix. (Used by University of Porto to handle the distribution of welcome kits to new students.) Link
- Participated in the development of an editorial website focused on addressing and discussing social challenges using Django and Wagtail.
- Worked on the development of a new interface for a private instance of the company's events management software using Django, HTMX and Svelte. This development allows the platform to become a SaaS, as it is fully customizable and features several layers of functionality.
- Contributed to the development of a location intelligence and data science platform tailored for city halls. Specifically, I played a key role in constructing a data entry back office using Django and HTMX. Link
- Developed a student mentoring portal for the University of Porto that includes various modules such as an editorial frontoffice for news and updates about the mentoring departement, and two backoffice interfaces: one for students for signups and activities information; and another for technicians/teachers to match students, manage mentoring processes and control activities.
- Implemented deployment automation and container boilerplate routines using Proxmox and Ansible.

Celery   1 mo

Redis   6 mos

Apache   2 yrs

AWS   2 mos

EVENTS EXPERIENCE

Support Team
DjangoCon Europe 2024

2024

Worked as part of the support staff in the conference in Vigo.

Staff/Speaker
PyCon Portugal 2023

2023

Worked as part of the organization staff in the conference at Coimbra Business School.
Delivered a 30-minute talk on building advanced back-office interfaces with Django and HTMX. Link

Staff
PyCon Portugal 2022

2022

Worked as part of the organization staff in the conference in Porto at DCC in FCUP.

Host/Staff/Speaker
DjangoCon Europe 2022

2022

Worked as host and part of the organization staff in the conference in Porto at SuperBock Arena.
Delivered a lightning talk about form utils in Django. Link

Host/Staff
DjangoCon Europe 2021

2021

Worked as host and organization staff in the online conference.

FREELANCE EXPERIENCE

Teacher
University of Porto

2025

- Taught a professional course on web development using Django, covering topics such as HTTP, MVC architecture, database integration, authentication, and front-end integration with SPA frameworks. Designed course materials, led hands-on coding sessions, and guided students in building real-world applications. Link

Lecturer
Computer Science Nucleus @ FCUP

2023

- Giving a weekly intensive course in full-stack web development to a group of university students.
The topics that are lectured include: HTML, CSS, Backend Development with Django, JavaScript and DOM Manipulation, AJAX, API Design, Introduction to frontend frameworks, Web Components and deployment using Linux machines.

EDUCATION

Full-Stack Developer/System Administrator   `2020 - NOW`
Grupo Escolas de Condução Oliveira

Created a management software to handle daily tasks at a group of driving schools. Also integrated it with a mobile app for students to check their lessons and exams.

- Developed a fully-featured web application for driving schools management. This application facilitates the management of various aspects, including customer records, lesson scheduling, exams, appointments, transactions, and more.
  Also includes features such as exporting data to PDF and printing receipts on thermal printers. Over time, the application has received regular updates, introducing new features and resolving issues. The application started as Django and evolved itself to include also HTMX with a new UI.

- Created a hybrid app designed for students that provides easy access to their booked classes and exam schedules. The app also offers the convenience of student identification through QR code scanning. It was deployed to the web and to the Google Play Store and was built with Ionic, ReactJS and Django REST Framework.

- Installation and ongoing maintenance of application servers and databases.

System Administrator   `2019 - NOW`
MEDI-MAIA Serviços Médicos

I mostly performed computer systems maintenance and small utilitary software.

- Installation and maintenance of computer systems.

- Deployed an application for dynamic generation of consent documents for personal data processing in compliance to GDPR using Python and Tkinter.

Software Developer/System Administrator   `2016 - NOW`
FOCA Automotive

Creation of an application to allow customers to book car washes.

- Developed a web application for customers to book car washes using PHP.

- Created a web application for staff members to efficiently manage bookings, communicate with customers, and send invoices via email using PHP.

- Designed and implemented an Android app dedicated to car wash booking, which offers vehicle registration and real-time booking status tracking using Flutter, NodeJS and MySQL Stored Functions.

- Completely revamped the infrastructure using Django, resulting in a new web application with enhanced user interface, mobile responsiveness, and integration of social network authentication (Google Auth) to facilitate car wash bookings.

- Provided maintenance support for a Prestashop online store in 2016.

- Installation and maintenance of application servers and databases.

Software Developer/System Administrator   `2016 - 2019`
FARCAR - Faria & Cardinal

Creation of applications and websites for vehicle advertising and sales.

- Development of a static website to showcase company information and featured vehicles.

- Launch of a new version of the website to display the complete inventory of vehicles using PHP.

- Integration of the website with a management panel to enable staff to autonomously manage vehicles.

- Installation and maintenance of servers and databases.

- Implementation of security cameras using Raspberry Pi modules with remote access.

UNIVERSITY EXPERIENCE

OUTSIDE CLASSES

Lecturer/Member
Nucleus of Computer Science @ FCUP

2017 - 2019

- Lecturer at a HTML, CSS and Bootstrap Workshop in 2019

- Lecturer at a HTML, CSS and Bootstrap Workshop in 2018

- Staff in a Computer Science event: "UPDATE 2018"

- Nucleus Member between 2017 and 2019

INSIDE CLASSES

MSc. Thesis
Dissertation

2022

- Development of a spatial regression model that predicts values of houses for sale using coordinates data from an existing dataset of housing market sales in Portugal.
  This project was built using Python, Jupyter notebooks, Django server and a Angular frontend for data display.

Security Oriented Application
Security of Systems and Data

2021

- Development of a P2P network system with a Kademlia protocol implementation together with a transactions module stored on a distributed blockchain using Java.

Mobile Application with AR
Graphical Computation

2021

- Prototype of a didatic interactive game for children with augmented reality for mobile devices using C and Unity.

Geo-Centered App
Advanced Database Topics
2020

- Simulation of virus infection using a dataset of taxi movements and graphical integration on a geographic map using Python.

Web App
Internship
2020

- Web Application for insertion of real estate construction expenses for future integration on a data warehouse with Django.

Web App
Embedded Systems
2020

- Web interface that connects to a control engine that allows the management of server states and UPS energy values built with Dart and Python.

Android App
Advanced Networks Topics
2019

- Proof-Of-Concept of an app that receives temperature and humidity readings and controls a remote light built with Dart and Python.

Project Draft
Software Project Management
2019

- Project Draft, Integrated system that allows stock management of a supermarket via video cameras and 3D modelling of store corridors to identify product locations, future-proof in-store system to facilitate customer communication and AI-driven purchase suggestions.

Web App
Software Architecture
2018

- Rides system ("Uber-like") with matchmaking using Google Maps API for defining current location. Built with Java and GWT.