

# Pablo Ricardo Roxo Silva

Computer Scientist, Senior Software Engineer and aspiring Software Architect

Salvador - Bahia - Brazil. Available for in-office and hybrid positions in Salvador or remote from anywhere.

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I love absolutely everything about computing, programming and mathematics.  
Experienced in algorithms, data structures, web development, mobile development, monoliths, RESTful APIs, microservices, relational databases, NoSQL databases and automated tests.  
Open for any stack, programming languages, frameworks, architectures, paradigms and methodologies.  
Enthusiast of best practices, patterns, organization and beautifully written codes.

Education			Languages		
Post-Graduation	Specialization in Software Architecture Pontifícia Universidade Católica de Minas Gerais (PUC Minas) Ongoing		Portuguese	Native	
	Specialization in Data Science & Big Data Pontifícia Universidade Católica de Minas Gerais (PUC Minas) 2021		English	B2 (5y course)	
	Specialization in Mobile Apps Development Serviço Nacional de Aprendizagem Industrial (SENAI) 2018		Spanish	B1 (3y course)	
			French	A1 (intending to learn and practice more)	
			Cyrillic	Know the alphabet and some words and sentences, after living in Kyiv (Ukraine), for one month in 2018 as a tourist.	
Graduation	Bachelor's in Computer Science Universidade Salvador (UNIFACS) 2014				
Tech Skills (purple items: bigger expertise; years of experience and year of start)					
Frontend	HTML (15y, 2009) Angular(4y, 2017) Blade (4y, 2018)	CSS (15y, 2009) jQuery (15y, 2009) jQuery Mobile (1y, 2013)	JavaScript (15y, 2009) Bootstrap (6y, 2017) DataTables (3y, 2019)	TypeScript (3y, 2017) Tailwind (1y, 2024) Leaflet (1y, 2023)	Vue (3y, 2019) SASS/SCSS/Less (3y, 2017)
Backend/ Algorithms	PHP (15y, 2009) RESTful APIs (7y, 2016) Delphi/Pascal (3y, 2006)	Laravel (6y, 2018) Python (1y, 2020)	Lumen (1y, 2019) Java (SE) (3y, 2009)	Nest (1y, 2020) Dart (2y, 2020)	Express (1y, 2020) C/C++ (2y, 2009)
Mobile	IONIC (3y, 2017)	Flutter (2y, 2020)	Java (Android) (1y, 2018)	Kotlin (Android) (1y, 2023)	Swift (iOS) (1y, 2018)
Database/ Cache/Cloud	SQL (18y, 2006) MongoDB (2y, 2020)	MySQL (15y, 2009) Redis (1y, 2021)	SQL Server (4y, 2019) Amazon S3 (1y, 2021)	PostgreSQL (2y, 2018) Backblaze B2 (1y, 2023)	FireBird (4y, 2006)
Others	JSON (15y, 2009) Git (8y, 2016) Scrum (7y, 2017)	Scikit-Learn (1y, 2020) WordPress (3y, 2014)	Docker (3y, 2017) PHPUnit (2y, 2021)	OpenCV (1y, 2015) JUnit (1y, 2017)	Beanstalkd (1y, 2021) Swagger (1y, 2020)
Work Experience (as software engineer)					
<i>* Note: In the year 2023 I only worked on freelancer projects, living a nomadic lifestyle. So please check the section “Work Experience (as temporary worker, freelancer or intern)” to see them. Now I returned to a regular lifestyle and I'm working as a consultant at PRODEB, which is a government company that hires only through public competitions. Thus, I'm still looking for a permanent position.</i>					
Companhia de Processamento de Dados do Estado da Bahia (PRODEB) Salvador (Brazil) - Hybrid February/2024 - Present	<ul style="list-style-type: none"><li>• Role: Senior Software Engineer (government employee).</li><li>• Activities: Software architecture, software development, database modelling, tests (automated), software deploying, software maintenance.</li><li>• Project: Atende 2.0. A software to manage services and scheduling for the entity SAC (Serviço de Atendimento ao Cidadão) in the state of Bahia.</li><li>• Frontend: HTML, CSS, JavaScript, Vue, jQuery, Tailwind, DataTables.</li><li>• Backend: PHP, Laravel.</li><li>• Database: SQL, SQL Server, PostgreSQL, Redis.</li><li>• Others: RabbitMQ, PHPUnit, Docker, Kubernetes, Supervisor, Sonar, Grafana, Prometheus, Git, Scrum.</li></ul>				
Jettax Automação Fiscal São Paulo (Brazil) - Remote September/2021 - October/2022	<ul style="list-style-type: none"><li>• Role: Software Engineer.</li><li>• Activities: Software prototipation, software development, database modelling, software maintenance.</li><li>• Project: Jettax 360. A software for accounting automation that retrieves all invoices from companies from different sources and then audit all of them, presenting an easy-to-read report for accountants and their managers.</li><li>• Frontend: HTML, CSS, JavaScript, Bootstrap, Vue.</li><li>• Backend: PHP, Laravel.</li><li>• Database: MongoDB, Amazon S3, Redis.</li><li>• Others: Beanstalkd, Docker, Git, Scrum.</li></ul>				
Capgemini Salvador (Brazil) - Remote July/2020 - September/2021	<ul style="list-style-type: none"><li>• Role: Senior Software Engineer (and team leader on project Verbas).</li><li>• Activities: Software requirements, software prototipation, software architecture, software development, database modelling, tests (automated), software maintenance, software documentation.</li><li>• Project: Verbas. A software for complementing paycheck information with complex calculations, apart from an existing paycheck software.</li><li>• Frontend: HTML, CSS, JavaScript, Bootstrap, Vue.</li><li>• Backend: PHP, Laravel.</li><li>• Database: SQL, SQL Server.</li><li>• Others: PHPUnit, Robot, Swagger, Git, Scrum.</li><li>• Project: Uno. A software for managing the processing of confidential court cases.</li><li>• Frontend: HTML, CSS, JavaScript, Bootstrap, Blade.</li><li>• Backend: PHP, Laravel.</li><li>• Database: MongoDB.</li><li>• Others: Git, Scrum.</li><li>• Project: Despesas Miúdas. A software for managing small government projects which don't need public biddings.</li><li>• Frontend: HTML, CSS, JavaScript, Bootstrap, Vue.</li><li>• Backend: PHP, Laravel.</li><li>• Database: SQL, SQL Server.</li><li>• Others: Robot, Swagger, Git, Scrum.</li></ul>				

<b>Assembleia Legislativa da Bahia (ALBA)</b> Salvador (Brazil) - In-office May/2019 - June/2020	<ul style="list-style-type: none"> <li>• Role: Software Engineer (government employee).</li> <li>• Activities: Software requirements, software prototyping, software architecture, software development, database modelling, tests (not automated), user training and support, software deploying, software maintenance.</li> <li>• Project: Portal RH ALBA. A software for managing all information about government employees and politicians (deputies) of the state of Bahia.</li> <li>• Frontend: HTML, CSS, JavaScript, Bootstrap, Blade, jQuery, DataTables.</li> <li>• Backend: PHP, Laravel, Lumen.</li> <li>• Database: SQL, SQL Server, Firebird.</li> <li>• Others: Git.</li> <li>• Project: Portal RH ALBA. A mobile application that has the same content of Portal RH ALBA's website. It was released in both Apple App Store and Google Play Store. This app was rewritten in Flutter and Dart, but this version wasn't released.</li> <li>• Mobile: IONIC, Angular, TypeScript.</li> <li>• Backend: PHP, Laravel.</li> <li>• Database: SQL, SQL Server.</li> <li>• Project: Constituição da Bahia. A mobile application with the entire constitution of the state of Bahia. It was released in both Apple App Store and Google Play Store.</li> <li>• Mobile: IONIC, Angular, TypeScript.</li> </ul>
<b>eCGlobal</b> Salvador (Brazil) - In-office August/2018 - November/2018	<ul style="list-style-type: none"> <li>• Role: Junior Software Engineer.</li> <li>• Activities: Software requirements, software prototyping, software development, database modelling, tests (not automated), user training and support, software maintenance.</li> <li>• Project: eCGlobal. A software for creating and managing custom social networks focused on surveys. Users could gather points and exchange for prizes after answering questions.</li> <li>• Frontend: HTML, CSS, JavaScript.</li> <li>• Backend: PHP, CodeIgniter.</li> <li>• Database: SQL, PostgreSQL.</li> <li>• Others: Docker, Git, Scrum.</li> </ul>
<b>Ericsson Inovação S. A. (EISA)</b> Salvador (Brazil) - In-office August/2017 - November/2017	<ul style="list-style-type: none"> <li>• Role: Junior Software Engineer.</li> <li>• Activities: Software development database modelling, tests (automated), user training and support, software maintenance, software documentation.</li> <li>• Project: Revenue Manager (RM). A software for managing information of a mobile operator in Ukraine.</li> <li>• Backend: Java.</li> <li>• Database: Cassandra.</li> <li>• Others: JUnit, Camunda, Sonar, Git, Scrum.</li> </ul>
<b>Fundo de Amparo à Pesquisa no Estado da Bahia (FAPESB)</b> Salvador (Brazil) - In-office September/2015 - August/2016	<ul style="list-style-type: none"> <li>• Role: Researcher.</li> <li>• Activities: Software requirements, software prototyping, software architecture, software development, tests (not automated), software deploying.</li> <li>• Project: during an uncompleted master's program, I worked developing computer vision software to analyze marbling of beef cuts.</li> <li>• Technologies: C/C++, OpenCV, MATLAB, LaTeX.</li> </ul>
<b>Colégio e Faculdade São Tomaz de Aquino</b> Salvador (Brazil) - In-office November/2006 - January/2009	<ul style="list-style-type: none"> <li>• Role: Junior Software Engineer.</li> <li>• Activities: Software requirements, software prototyping, software development, database modelling, tests (not automated), user training and support, software deploying, software maintenance.</li> <li>• Project: Jaguar. A software to manage all information about students, teachers and classes at an education institution.</li> <li>• Technologies: Delphi, SQL, Firebird.</li> </ul>

#### Work Experience (as college teacher)

<b>União Metropolitana de Educação e Cultura (UNIME)</b> January/2021 - December/2021	<ul style="list-style-type: none"> <li>• Subjects taught: Algorithms; Object-Oriented Programming II; Web Development I; Web Development II.</li> </ul>
<b>Serviço Nacional de Aprendizagem Industrial (SENAI)</b> February/2014 - February/2015	<ul style="list-style-type: none"> <li>• Subjects taught: Algorithms, Object-Oriented Programming, Databases, Web Development I; Web Development II; Applied Math; Completion of Course Work.</li> </ul>

#### Work Experience (as temporary worker, freelancer and intern)

<b>Merkle DACH (Portugal)</b> December/2023 - January/2024	<ul style="list-style-type: none"> <li>• Role: Software Engineer (freelancer).</li> <li>• Technologies: PHP, CS Cart, SQL, MySQL, PHPUnit, Git, Scrum.</li> </ul>
<b>Prefeitura de Gaspar-SC</b> October/2023 - December/2023	<ul style="list-style-type: none"> <li>• Role: Software Engineer (freelancer).</li> <li>• Technologies: HTML, CSS, JavaScript, jQuery, Bootstrap, DataTables, Leaflet, PHP, Laravel, SQL, MySQL, Backblaze B2, Git.</li> </ul>
<b>Loginfo</b> August/2023 - September/2023	<ul style="list-style-type: none"> <li>• Role: Software Engineer (freelancer).</li> <li>• Technologies: HTML, CSS, JavaScript, jQuery, Bootstrap, PHP, Laravel, SQL, MySQL.</li> </ul>
<b>Loovi</b> July/2023 - August/2023	<ul style="list-style-type: none"> <li>• Role: Software Engineer (freelancer).</li> <li>• Technologies: HTML, CSS, JavaScript, Angular, TypeScript.</li> </ul>
<b>ObservaBaía (UFBA)</b> May/2023 - August/2023	<ul style="list-style-type: none"> <li>• Role: Software Engineer (freelancer).</li> <li>• Technologies: HTML, CSS, JavaScript, jQuery, Bootstrap, Leaflet, PHP, WordPress, SQL, MySQL.</li> </ul>
<b>Sábio Portal Educacional</b> August/2019 - March/2020	<ul style="list-style-type: none"> <li>• Role: Software Engineer (freelancer).</li> <li>• Technologies: HTML, CSS, JavaScript, jQuery, PHP, Laravel, SQL, MySQL.</li> </ul>
<b>StartOnApp</b> October/2018 - May/2019	<ul style="list-style-type: none"> <li>• Role: Software Engineer (freelancer).</li> <li>• Technologies: HTML, CSS, JavaScript, Bootstrap, IONIC, Angular, TypeScript, Git.</li> </ul>
<b>Serviço Nacional de Aprendizagem Industrial (SENAI)</b> November/2017 - February/2018	<ul style="list-style-type: none"> <li>• Role: Software Engineer (freelancer).</li> <li>• Technologies: HTML, CSS, JavaScript, jQuery, PHP, SQL, MySQL.</li> </ul>

Serviço Nacional de Aprendizagem Industrial (SENAI) August/2017 - August/2017	<ul style="list-style-type: none"> <li>♦ Role: College Teacher (temporary).</li> <li>♦ Subjects: Projects of Applications.</li> </ul>
Universidade Federal da Bahia (UFBA) May/2017 - September/2017	<ul style="list-style-type: none"> <li>♦ Role: College Teacher (intern).</li> <li>♦ Subjects: Algorithms.</li> </ul>
Quântica Comunicação Digital March/2017 - June/2017	<ul style="list-style-type: none"> <li>♦ Role: Software Engineer (freelancer).</li> <li>♦ Technologies: HTML, CSS, JavaScript, jQuery, Bootstrap, PHP, WordPress, IONIC, Angular, TypeScript, SQL, MySQL.</li> </ul>
Serviço Nacional de Aprendizagem Industrial (SENAI) September/2016 - December/2016	<ul style="list-style-type: none"> <li>♦ Role: Software Engineer (temporary).</li> <li>♦ Technologies: HTML, CSS, JavaScript, jQuery, PHP, SQL, MySQL.</li> </ul>
KD Inovação August/2015 - September/2015	<ul style="list-style-type: none"> <li>♦ Role: Software Engineer (freelancer).</li> <li>♦ Technologies: HTML, CSS, JavaScript, PHP, SQL, MySQL.</li> </ul>
CNP Promotora - Correspondente Bradesco Promotora April/2012 - February/2013	<ul style="list-style-type: none"> <li>♦ Role: Software Engineer (intern).</li> <li>♦ Technologies: HTML, CSS, JavaScript, PHP, SQL, MySQL.</li> </ul>
RH Soft November/2011 - March/2012	<ul style="list-style-type: none"> <li>♦ Role: Software Engineer (intern).</li> <li>♦ Technologies: Delphi, SQL, Firebird.</li> </ul>
Centro Tecnológico Social do Pelourinho e Dossier Digital January/2011 - November/2011	<ul style="list-style-type: none"> <li>♦ Role: College Teacher (temporary).</li> <li>♦ Subjects: Data Modelling; Atelier Platform Development; Windows and Office.</li> </ul>
eCGlobal November/2009 - January/2011	<ul style="list-style-type: none"> <li>♦ Role: Software Engineer (intern).</li> <li>♦ Technologies: HTML, CSS, JavaScript, PHP, SQL, MySQL.</li> </ul>
Faculdade Área 1 April/2009 - September/2009	<ul style="list-style-type: none"> <li>♦ Role: Technical Support (intern).</li> <li>♦ Technologies: Windows.</li> </ul>

## Published Papers

- ♦ ROXO, P.; MARQUES NETO, M. C. 2DrowSys: An Anti-drowsiness Device for Motorcyclists. In: WEBMEDIA'21 – XXVII Simpósio Brasileiro de Sistemas Multimídia e Web. São João del Rei-MG. 2021.
- ♦ ROXO, P.; SALVADOR, L. do N. BlinALT: Projeto de um Sistema Colaborativo de Audiodescrição de Imagens para Deficientes Visuais. In: WEPGCOMP'17 – II Workshop de Estudantes do Programa de Pós-graduação em Ciência da Computação. Salvador-BA. 2017.
- ♦ PENHA, J. P. G.; ROXO, P.; OLIVEIRA, L. R. Visual Analysis of Morphological Features of Live Cattle From RGB-D-T Data. In: SIBGRAP'16 – XXIX Conference on Graphics, Patterns and Images. São José dos Campos-SP. 2016.

## Participation in Hackatons

- ♦ Competitor at HackSerpro: Inovação pelo Brasil (Serpro, 2020)
- ♦ Mentor and technical appraiser at Hackathon MPBA 2019: Maratona de Programação em Prol da Sociedade (MPBA, 2019)
- ♦ Mentor at Maratona de Inovação: Hackathon + UJ (Unijorge, 2018)

## Participation in Immersions

- ♦ Full Cycle (Full Cycle, 2024)
  - ♦ GoLang from zero to deploy: a quick guide (2h)
  - ♦ Docker from zero to deploy: a quick guide (3h)
  - ♦ Multitenancy applications with Nest.js (3h)
  - ♦ Intensive Next.js and React.js (3h)
  - ♦ Practical API Gateway and Kong (2h)
- ♦ Hero Week (Hero Code, 2024)
  - ♦ Final project and the success of your career as a programmer (2h)
  - ♦ Scalable backend with clean architecture and MongoDB (2h)
  - ♦ Discover how to create the frontend of a scalable project (2h)
- ♦ The great opportunity and beginning of the project (3h)
- ♦ API management with Kong (1h)
- ♦ Sales API development with Golang (3h)
- ♦ The latest in Frontend with React and Next.js (3h)
- ♦ Integrating the ticket system with Kong (1h)
- ♦ Python Week (Hashtag Treinamentos, 2021)
  - ♦ Web automation (web-scraping) with Python (2h)
  - ♦ Complete project of Data Science + Machine Learning (2h)
  - ♦ Data analysis with Python (2h)
  - ♦ Automation of processes and tasks with Python (2h)

## Courses Given

- ♦ Manipulating and testing the frontend with Robot Framework (3h, UNIME, 2021)
- ♦ Manipulating and testing the backend with Postman (3h, UNIME, 2021)
- ♦ A full application in PHP/Laravel (3h, UNIME, 2021)
- ♦ Software versioning with Git (3h, UNIME, 2021)
- ♦ Laravel: Hands On! (8h, Espaço Colabore, 2019)
- ♦ Mobile apps development (IONIC) with webservice manipulation (PHP) (4h, UFBA, 2019)
- ♦ Digital Image Processing: applications with OpenCV in C/C++ (4h, UFBA, 2015)

## Lectures Given

- ♦ Automated software testing: A programmer's must (2h, UNIME, 2024)
- ♦ IT Professional's Career Ahead to 2023 (2h, ICEIA, 2023)
- ♦ Assistive Technology: Computer Science as human function restorer of people with disabilities (1h, UFBA, 2019)
- ♦ BlinG: a gamebook platform for mobile devices and users with visual impairment (1h, SENAI, 2018)
- ♦ Digital Image Processing: a theoretical and practical introduction with OpenCV (1h, UFBA, 2015)
- ♦ Ubiquitous Computing: omnipresence of technology (2h, SENAI, 2014)
- ♦ Location-based mobile games: a project of a location-based game (1h, UNIFACS, 2013)
- ♦ The relevance of Mathematics' subjects in Computer Science course (1h, UNIFACS, 2013)

## Courses Taken

- ♦ Flutter Hands On: From scratch to app (8h, Espaço Colabore, 2023)
- ♦ Fundamentals of Backend Communications and Protocols (26h, Udemey, 2023)
- ♦ Robot Beginner with Selenium Webdriver (5h, QAninja Academy, 2021)
- ♦ Creating your first Flutter app (2h, Balta, 2020)
- ♦ Algorithms with Dart (5h, Balta, 2020)
- ♦ Laravel 5.3 Course – Systems with PHP (2h, EspecializaTI, 2019)
- ♦ Computational Reasoning (4h, UFBA, 2018)
- ♦ Introduction to test automation in the context of the Java language (6h, UFBA, 2017)
- ♦ #PraCegoVer: Image description course for social networks (4h, ALBA, 2017)
- ♦ Web Development with Java in Practice (3h, UFBA, 2015)
- ♦ Android application development (8h, LinguÁgil, 2012)
- ♦ HTML5 and CSS3 in practice (8h, LinguÁgil, 2012)
- ♦ Android application development (8h, LinguÁgil, 2011)
- ♦ Object-oriented JavaScript (4h, UNIFACS, 2010)
- ♦ Java SE and MySQL (60h, Área 1, 2009)
- ♦ UML 2.0 (16h, TecKnow, 2009)
- ♦ Mobile applications and games with Java ME (8h, UNIFACS, 2009)
- ♦ Installation and maintenance of computers and networks (120h, SOS Computadores, 2007)
- ♦ Robotics with Lego Mindstorm (8h, UNIFACS, 2006)

## Lectures Taken

- ♦ Flutter news for 2023 (1h, Google, 2023)
- ♦ Best Accessibility Practices in Android App Development (1h, Google, 2023)
- ♦ Incredible news for Android in 2023 (1h, Google, 2023)
- ♦ What's new in CSS (1h, Google, 2023)
- ♦ Unidev Tech Day: Blockchain and Bitcoin (3h, UNIME, 2022)
- ♦ Artificial Intelligence applied in companies (2h, SEBRAE, 2022)
- ♦ Introduction to test automation in the context of the Java language (7h, UFBA, 2017)
- ♦ Assistive Technology and Accessibility in the educational context (2h, UFBA, 2017)
- ♦ The Researcher's Career in Computer Science (2h, UFBA, 2015)
- ♦ Web Components: An increasingly present future (1h, LinguÁgil, 2014)
- ♦ Android Development: A new form of entrepreneurship (3h, SENAC, 2014)
- ♦ Version Control with Git (4h, ERBASE, 2013)
- ♦ Vehicle Networks: Models and Applications (4h, ERBASE, 2013)
- ♦ Software Variability (4h, ERBASE, 2013)
- ♦ Android application development (4h, ERBASE, 2012)
- ♦ User interface in mobile applications (4h, ERBASE, 2012)
- ♦ Context-sensitive mobile computing (4h, ERBASE, 2012)
- ♦ Crimes on the Internet (2h, UNIFACS, 2009)
- ♦ Interactive applications for Digital TV (2h, UNIFACS, 2009)
- ♦ Diversity in programming languages (2h, UNIFACS, 2009)
- ♦ ITIL and COBIT (3h, FIB, 2009)
- ♦ iOS x Android (2h, UNIFACS, 2009)

## Participation in Events

- ♦ UNIDEV Tech Day 2 (speaker, 2024)
- ♦ Google IO Extended Brasil 2023 (2023)
- ♦ UNIDEV Tech Day (2022)
- ♦ XXVII WebMedia (speaker, 2021)
- ♦ Cursos de Férias UNIME (speaker, 2021)
- ♦ LinguÁgil 2018 (2018)
- ♦ Interações (2018)
- ♦ II WEPGCOMP (speaker, 2017)
- ♦ Campus Party SP 2017 (2017)
- ♦ SEMCOMP 2015 (speaker, 2015)
- ♦ XXVIII SIBGRAPI (staff, 2015)
- ♦ Mundo SENAI (speaker, 2014)
- ♦ LinguÁgil 2014 (2014)
- ♦ GDG DevFest Nordeste (2014)
- ♦ GDG TechTalk (2014)
- ♦ XIII ERBASE (2013)
- ♦ SEMCOMP 2013 (speaker, 2013)
- ♦ LinguÁgil 2012 (2012)
- ♦ XII ERBASE (2012)
- ♦ SEMCOMP 2012 (staff, 2012)
- ♦ LinguÁgil 2011 (2011)
- ♦ Blender Day 2011 (2011)
- ♦ CloudCamp Day (2011)
- ♦ LinguÁgil 2010 (2010)
- ♦ III Semana TIC da Bahia (2009)
- ♦ II Semana TIC da Bahia (2008)

## Volunteer Work

- ♦ Introduction to the use of computers, Office and Internet in social projects (15h, UNIFACS, 2013)
- ♦ Introduction to the use of computers, Office and Internet in social projects (18h, UNIFACS, 2010)