

PEDRO SOBOTA

SOFTWARE ENGINEER

With more than 15 years experience as a software engineer and data engineer, I have designed from the ground-up and delivered a number of robust and performant .NET and Java enterprise systems in production, and Data Engineering projects in the Azure cloud. I have led teams of developers and managed successful delivery across the entire software lifecycle.

WORK EXPERIENCE

2022 - 2023

Data Engineer and Software Engineer (1 year, 3 months)

North American IT Consultancy company

In a project for an international client, developing in Spark and .NET, in the Azure/Databricks environment. Developed new high-volume integrations in Scala and Spark SQL (500.000.000 of data points over 6 months) ingested from Kafka. Wrote C# 11 and LINQ to query paged REST services and join to Azure Synapse data, using Newtonsoft.JSON (100.000 of data points). Analyzed stored procedures in Azure Synapse. Managed Databricks cluster deployments. Developed pipelines in Azure Data Factory and integrated with Databricks notebooks. Worked with external tables (blob storage), creating storage for new applications. Developed algorithms in Spark RDD and Scala to conform malformed CSV files and de-duplicate and join data across large Delta Lake tables. Repartitioned Delta tables. Imported data warehouse data into Delta. Performed Delta and Kafka analysis, including graphing, in PySpark. Developed automation in PowerShell using the Databricks CLI. Managed tables locally (Hive) and in the Catalog. Worked with JSON Schema and XSD validations in Java. Wrote Kafka consumers in Java, Scala and .NET. Upgraded build system to Sbt with 4x faster deployment time over Jenkins. Worked with a team of 5 developers in Brazil and maintained periodic meetings with international brand stakeholders in Europe and South Asia, in a globally distributed team.

.NET and Java Developer (1 year)

Kantar

I developed in .NET and Azure Cloud in data-oriented projects such as TGI (demographic polling). I maintained a data-processing application for polled data in Windows Forms working with large XML files. I rewrote the TGI processing application in .NET, processing millions of records per semester, and deployed it to production to Azure, running two polling seasons successfully. I maintained and upgraded the Java form-recognition (OCR) application. Created Dockerfiles for all applications.

2021 - 2022



PHONE

+55 11 934234019



WEBSITE

<https://www.pedro.sobota.nom.br/>



EMAIL

psobota@pedro.sobota.nom.br



LOCATION

São Paulo, SP, Brazil

2024 - 2026

CYBERSECURITY

Universidade Anhanguera

(Ongoing) 1st Semester

2017 - 2019

MATHEMATICS (BsC)

Universidade do Sul de Santa Catarina

Semesters 1-3 concluded

CERTIFICATES

- Microsoft Certified: Azure

Fundamentals (2024)

SKILLS

- C# and .NET
- Apache Spark
- Apache Kafka
- Azure
- Azure Databricks
- Scala, Java
- PowerShell
- Python
- JSON
- SQL Server
- MySql

EXPERIENCE (CONTINUED)

I maintained daily communication with a distributed team of developers across South America and stakeholders.

.NET Developer (6 months)

ESSS

I did .NET development in the .NET Framework 4.6, improving an integrative desktop application for fluid simulation (CFD) products, utilizing the Ansys Workbench SDK (.NET Object Model). Developed fixes and features such as better error handling and user experience improvement. Wrote integration tests in PyTest. Worked with Conda package management. Worked with XML, defined an application versioning scheme and deployed new versions.

C++ Developer and Team Lead (1 year, 9 months)

Condor Instruments

In the technological park CIETEC in USP-SP, I worked for a startup company developing C++ desktop scientific software in a small team of developers, which I also led and mentored. We developed in C++/QT and did tests in QTests. I implemented a multithreading version of the sleep wrist device reading routine which could read many devices in parallel. I found a bug in the hardware reading (C code) and it was subsequently fixed. I did investigations in scientific routines to investigate bugs, such as Cosinor (phase alignment), doing many proof-of-concepts in Mathematica. As a team lead, I managed the team's JIRA board, conducted periodic status meetings, did interviewing assignments, and delegated work to developers.

Java and Scala Developer (1 year, 10 months)

Reamp

I was a Java developer working on DataHub, a Java backend service for aggregating and transforming data from tens of API marketing sources (Google Analytics, Criteo). Created a data integration backend app in Scala writing to a PostgreSQL database. Developed ReactJS front-end components in JSX. Created a Dockerfile for a Ruby on Rails application.

Python Backend Developer (1 year, 4 months)

Seepix

I developed backends for Digital Signage systems in Python and PHP. I developed a Python backend task processing system, running on-premises in a Linux environment, ingesting and encoding videos (integrating with ffmpeg) using JSON and uploading the files to Amazon S3. I developed a PHP SOAP webservice ingesting 20-50 messages per second from displays deployed in the field, with XML message format; improved scheduling algorithms; developed a new version of the CMS in CodeIgniter and AngularJS with JavaS-crypt; deployed and monitored applications to remote Linux servers via ssh.

EXPERTISE

- Unit and integration testing
- Continuous Integration (CI)
- Continuous Delivery (CD)
- AWS
- ReactJS
- AngularJS
- Linux
- Docker

LANGUAGES

- Portuguese (native)
- English (fluent)
- Spanish (beginner - private teacher)

EXPERIENCE (CONTINUED)

2013 - 2013

.NET Web Developer and Team Lead (8 months)

Akayou

I was engaged as a consultant to help build a team of programmers to build a web product (website creator) hosted on AWS. I triaged candidates and performed technical interviews. Developed a backend in C# and led the team to develop the landing page in Node.js. I created infrastructure in AWS (S3, RDS, Route53, EC2) and managed deliveries and maintained regular stakeholder meetings, delivering initial versions of the product in production.

2011 - 2013

.NET Web Developer (2 years, 1 month)

TônicaMix

I created the website for HBuster, an electronics company, in ASP.NET MVC, featuring dynamic product and category displaying, deploying it to production. I also developed three websites in ASP.NET MVC: Bridgestone, Abbott Humanizar, and Relance. I developed a client database import and export routine from SQL Server for Iguatemi One - CRMALL in .NET (C#). I also developed a graphical game in JavaScript and HTML5 Canvas for deployment on Facebook.

2010 - 2011

.NET Developer Consultant (2 years)

Tech4B

I worked as a consultant porting a backend application written in Visual Basic to C#. The application ran and aggregated outputs of multiple code static analysis tools in multiple languages (FXCop, FindBugs, C and ABAP validators, etc.) and produced and output statistics in reports. I performed the relational database modeling (SQL Server) and also developed in ASP.NET with concurrent AJAX a front-end website. The application was deployed in production and ran jobs for clients such as Embraer and Porto Seguro.

2008 - 2010

.NET Developer (2 years)

LabOne Systems

At LabOne, I initially developed a playlist editing functionality for the video player software, adapting it to improve its object-orientation after feedback from my leadership. I subsequently load-tested the player application using Apache JMeter, presenting a report of results to my leadership. I then integrated the MedialBox framework, in .NET, in web applications, which performed media ingestion, transformation and distribution tasks. I helped program the video portal Festival do Minuto in ASP.NET, including its Admin website; programmed a royalties calculation system for UBC (Brazilian Union of Composers) in ASP.NET MVC; and developed calculated end-user reports.

EXPERIENCE (CONTINUED)

2005 - 2008

.NET Developer (2 years, 6 months)

SBS Consultores

I was responsible for rewriting the Hospitalar Pharmacy Medical Dose system in .NET. I worked from specifications and rewrote the application in Windows Forms, in three tiers (UI, Model and Data Access). I designed a configuration window using XML to persist generic configuration parameters. The solution had about 20.000 lines of code and an NUnit test suite was created containing over 100 tests. The application utilized .NET dynamic loading to achieve database vendor-agnostic data storage (SQL Server, MySQL). It was also experimentally tested on Linux using Mono.

After finishing it, I worked on a data initiative interfacing with the company's Blood Bank software, by consuming its data using Microsoft SQL Server Transformation Services and aggregating a cube in Analysis Services. Experimentally, Windows Workflow Foundation was also employed to design a workflow-oriented version of the application.

2003 - 2004

ASP/.NET Developer (1 year, 6 months)

Versifico Tecnologia

I was hired to developed an ASP CRM web application for a governamental client. I developed back-end functionality for multiple sectors like warehousing, accounting, and equipment procurement and front-end (HTML and JavaScript) for forms validation and rendering of official documents like payment forms.

I also developed a prototype mobile Windows CE CRM application using Visual Basic .NET, subsequently porting it to C#, containing signup and data listing forms.

2002 - 2002

HTML Developer (1 year)

Tesla Tecnologia

I developed HTML frontends for e-commerce websites of local brands. I also developed JavaScript validation forms and, subsequently, ASP code integrated to Access and SQL Server for saving customer data into the database. I also manipulated CSS and wrote SQL code.