José R. Sousa Phone: 904-747-0002

4699 Lenoir Avenue South, Apt 109, FL 32216 **E-mail:** <u>irfsousa2@gmail.com</u> **LinkedIn**: https://www.linkedin.com/in/jrsousa2/ **GitHub:** https://github.com/jrsousa2

## **SUMMARY OF QUALIFICATIONS**

- Large experience in database/data warehouse and SQL (query language).
- Expert at SAS -- created stored processes and ETL's, wrote advanced code to produce tables and reports, and truly mastered SAS macros. Created performance dashboard with SAS/GRAPH and reports with Proc Report.
- Expert knowledge of SAS Enterprise Guide and SAS Enterprise Miner.
- Great with Python programming in VS Code. Created executable from codes, upscaled and enhanced videos with pre-trained AI models using an NVIDIA GPU, made web API requests to retrieve data/images, created GUI's with TkInter and wxFormBuilder, loaded Excel and XML files into pandas dataframes, read and wrote to Excel files with openpyxl, created formatted PowerPoint slides automatically, processed image and audio with ffmpeg, created virtual environments, automated batch jobs, etc. All can be viewed on my Github.
- Ran ELT in Snowflake and ETL jobs in Unix using Unix scripting.
- Strong with statistical models (decision trees, GLM, logistic regression, etc.) and data analytics and familiar with actuarial analyses and actuarial reports.
- Expert at MS Excel, created advanced spreadsheets with VBA macros, automated charts and graphs.
- Most of my experience is in the insurance industry. Created a wide variety of loss triangles, calculated ceded losses from reinsurance contracts, calculated earned premiums and joined claims to policies to create reports on loss ratio and in-force policies, among others. Performed data reconciliation with the general ledger.
- Exposure to accounting principles (GAAP, STAT), created YTD summary reports
  to support quarterly filings (10-Q and 10-K) using the general ledger database
  and performed account and profit center level reconciliations with it.
- Graduated in Math / Statistics from the best university in Brazil (U of São Paulo).
- Great with logical reasoning, self-taught, can work independently, wrote papers in math as hobby (e.g. <a href="https://arxiv.org/abs/2109.15306">https://arxiv.org/abs/2109.15306</a>). Great programming and data management skills come from math background.
- Languages: English, Portuguese (native) and French.
- I have a green card (obtained thru NatGen), and dual citizenship (Brazil/Canada).

### **SOFTWARE**

#### SAS:

- Platforms: Unix, Linux and Windows Server.
- Modules: BASE, STAT, GRAPH, ACCESS, CONNECT.
- Expert knowledge of most used Procs, including Proc Report.
- Advanced macro language. Stored processes.
- Databases: Oracle, Teradata, SQL Server / SSMS and their IDE's.
- Data Warehouse: Snowflake, Databricks, PySpark, BigQuery.
- Cloud Computing: Working knowledge of AWS, Azure and GCP.
- BI / Statistical Modeling: SAS Enterprise Guide, Power BI.
- Operating Systems: Unix, Linux, Windows.
- Programming: Python, VBA, VBScript, Unix scripting, DOS batches.
- Code Editors: VS Code.
- MS Office: Excel, PowerPoint, OneNote, SharePoint.
- Other: Git, regular expressions, Jira, WinScp, Putty, MSYS2, XML, JSON.

### PROFESSIONAL EXPERIENCE

- Worked on customer remediations, responsible for the creation of the final artifacts from which refunds and letters are issued to customers as required by regulators, following strict Confluence procedures.
- Managed SAS code used to create final remediation artifacts, made changes to the code to add enhancements, optimize performance and minimize the number of defects and findings in peer reviews. As an example of enhancement, when a new analyst takes over a remediation, all the artifacts and SAS tables created by the previous analyst are automatically saved to a new subfolder as backup.
- Created ETL's to produce new artifacts by mapping fields from the execution data requirements (EDR) to data tables. Contributed to design artifact layouts.
- Used GitHub for code version control and sharing and DMS as a secure repository for storing and sharing artifacts.

# Truist, Charlotte, NC (banking)

Data Developer SQL/Python (Randstad contractor / remote) 09/2021 - 03/2022

- Created rules based decision tool for the compliance and data analysts to choose their optimal analytics application as a web form created in Python.
- Created and maintained current report on user accesses for the various proprietary applications and data repositories (AD, ACL), for compliance.
- Ran reconciliation between ServiceNow/RITM and data pulled from the mainframe to assess correctness of an automatic ticket creation process for abends (abnormal job termination), and presented findings with PowerPoint.
- Pulled reports from the SAS grid and from the data lake/data warehouse with Snowflake and produced documentation following internal templates.

#### Florida Blue, Jacksonville, FL (healthcare)

SAS Developer (Datasoft contractor / remote)

04/2020 - 08/2021

- Developed ETL codes to pull data from databases such as Oracle and DB2 and others, using SAS 9.4 on AIX (Unix) and Enterprise Guide.
- Joined the data from multiple sources to create agent fraud detection analytics for the SIU dept with various metrics. Created macro to automate the formatting of the report for each metric using Proc Report, and added all to a single Excel file using ODS tagsets.ExcelXP.
- Automated and scheduled various SAS ETL codes in Unix, with a SAS macro that scans a Unix directory for SAS codes, submits them, generates a log file and a summary error report and sends the error reports and output by e-mail.
- Used HTML syntax in SAS to compose rich text e-mail alerts.
- Combined DOS, WinScp and VB scripts to schedule codes and automate moving files to and from Unix and Windows shared folders using SFTP (secure transfer).
- Used SAS Proc Export to export SAS tables from Unix to Windows.
- Created a neat SAS stored process for various canned reports.
- Created visualizations and reports using Power BI.
- Gave training to team members on how to design SAS stored processes, covering how to create the GUI and how to handle the variable user's inputs.

### National General (now Allstate), New York, NY (insurance)

Insurance Data Programmer / Data Manager

04/2015 - 12/2019

- Reported to the holding company's chief actuary.
- Planned and created datasets in SAS by combining data from various databases from which loss triangles and data analytics were produced.

- Created actuarial loss triangles used in reserving models with SAS macros, and reconciled the numbers with the company's general ledger.
- Created quarterly company-wide YTD summary report in Excel using general ledger data pulled with Oracle BI Discoverer to support quarterly filings and the annual report preparation (10K, 10Q), for the SEC and other regulators. Later, BI Discoverer was replaced by straight SQL queries on an SSMS linked server.
- Participated in the ATLAS project, whose goal was to capture claim and policy level data into the GL Oracle database.
- Using SAS, performed statistical data analyses to track performance of products, lines of business and segments.
- Mastered the internal claims data system of the company (EPIC), stored in Oracle and SQL Server databases, as well as legacy data, and moved the data to the SAS server to create reports with SAS macros and SAS code. These reports were used internally or provided to consultants, auditors and regulators.
- Created complete documentation about work done on legacy data from acquired companies (such as Tower and EuroAccident), covering data reconciliations, reinsurance logic for ceded losses, SQL queries used, etc.

# AIG, New York, NY (insurance)

SAS Programmer (Experis contractor / FTE)

12/2011 - 12/2014

- As a data modeler, planned and pulled data from multiple sources (mainframe, DB2, SQL Server and Oracle) to produce enhanced tables that met the needs of all reports and models and processes, using ETL and SAS/Access interface to OLE DB, ODBC, etc.
- Created ETL's to read VB/VSAM files on IBM mainframe and load them into SAS tables on Windows. These files became the data foundation of the Global Actuarial Pricing department.
- Wrote advanced SAS macro and created a wide variety of loss triangles used to derive LDF's and obtain the ultimate claims.
- Worked in the deep dive and profitability analyses of the book of business, by pulling data on losses and premium, and policy and insured attributes (such as SIC codes) to generate various reports and metrics that provided insights about the performance of the various lines of business and segments.
- Created a smart algorithm for linking policies based on insured and policy characteristics in SAS. This policy linking groups policies into accounts and is the basis for the creation of account level model estimates, which go into a scoring model called AQI (Account Quality Index).
- Worked with Deloitte consultants and provided them with various loss triangles to be used as inputs into the Commercial Auto pricing tool. Also worked closely with Deloitte on the Specialty Worker's Comp model, making sure that deliverables such as SAS codes, data and predictive model results met the requirements.
- Created weekly scheduled jobs to pull submission data entered by underwriters into the AQI model and update a Qlikview dashboard that displays information such as number of accounts by AQI score, business type, region, etc.

#### **EDUCATION**