SANTIAGO BAYETA

SKILLS

Sr. Software Engineer specialized in Enterprise Systems, data modeling, architecture and systems integrations. Vast experience in SQL (Postgres, Oracle), Java, Javascript and Python.

WORK FXPFRIFNCF

AUSTRAL IT SAS, Mendoza - Owner, Sr. Software Engineer

APR 2016 - PRESENT

- Grupo Mirgor JUN 2020 PRESENT
 - Technical leader, advising on business analysis, system architecture and data modeling.
 - Backend development on the company floor-shop system, a Java Spring Boot microservices based application.
 - Equipment integration using several communication protocols (raw TCP Sockets, HTTP requests, serial port) and several languages (JAVA, C#, Python3). Technical leader for the biggest projects in the company (for Samsung, Harman Kardon and Toyota).
 - o Database design & programming (Oracle).
 - o Automated Integration testing using Python3.
 - SAP integration using REST APIs.
 - Migration of a legacy system functionality from an acquired companies to Mirgor's own system.
 - Performance problems diagnostics through logs analysis using awk, grep, Python3, gnuplot, jupyter, MS Excel.
 - Functional analysis and specification of new projects. Regular communications over video chat with Mirgor's customers engineers from Europe and South Korea, speaking English.
 - Brightstar Corp JUL 2018 DIC 2019
 - o Technical leader.
 - o Functional analysis and specification of the factory rework system.
 - Equipment integration using screen scraping on MS Windows desktop applications using UI Automation on .NET and HTTP communications.
 - Distrocuyo SA JAN 2018 JUN 2018
 - Machine learning project for estimating the optimal setpoint of several electrical distribution transformers to minimize power losses, using scikit-learn (random forest), pandas and jupyter.
 - o Data ETL from the company SCADA system.
 - A-Consultants JUN 2016 NOV 2017
 - Technical assistance in two Data Science projects for UNICEF (population estimation through satellite images), using scikit-learn (random forest), pandas and jupyter.

Freelance, Mendoza - Sr. Manufacturing Technology Consultant

MAY 2013 - MAR 2016

- Compumundo SA JUN 2014 MAR 2016
 - Functional analysis and specification of the company's post sale traceability system for Samsung and ASUS operations.
 - o Data modeling consulting, database design.
- Brightstar Corp JUL 2015 SET 2015
 - Functional Analysis and specification on test equipment integration and data extraction.
- PC Arts SA JAN 2014 JUL 2014
 - o Manufacturing Technology consulting, Industry 4.0.
 - Consulting on software vendor selection for integrating their SMT (Surface Mount Technology) equipment.
 - o Process engineering consulting.
- Digital Fueguina MAY 2013 DEC 2013
 - Functional Analysis and specification of software interfaces between the factory floor-shop system and its ERP (Oracle EBS)

Digital Fueguina, Tierra del Fuego — Plant Manager

MAR 2010 - APR 2013

- Management of a 800+ people manufacturing operation.
- Manufacturing Technology selection and implementation.
- Process design and implementation.
- Enterprise software selection and governance.

Delphi Automotive Systems, Tierra del Fuego — Manufacturing Technology Leader (SMT and automated processes)

APR 2004 - SEP 2009

- Process engineering.
- Equipment setup and integration.
- Robots and CNC equipment programming and configuration.
- Process automation, PLC programming.

ICSA, Mendoza — Industrial automation software engineer

MAY 2002 - MAR 2004

- PLC Programming (GE Fanuc).
- SCADA Programming (Intellution Fix).
- Hydropower plant commissioning.

EDUCATION

Universidad de Mendoza, Mendoza — Electronics & Telecommunications Engineer

1997 - 2002

• Top of my class with a 8.98/10.00 score.

PERSONAL PROJECTS

Manpower utilization web application

- Web application for visualizing manpower utilization in manufacturing operations.
- Built with a very simple architecture, using PostgreSQL, Node Js & Express.
- No front-end frameworks, just plain HTML with SSR and real-time updates.
- Custom-made sankey diagrams and scatter charts, no libraries or frameworks used, just emitting SVG from data.
- Stochastic data generation application developed in Python3 using the simpy library for Discrete Event Simulations from statistical parameters.

Robotic water sprinkler

2017

- Small 2-axis robotic sprinkler, based on Arduino and programmed in C.
- Hardware integration, software and mechanical parts designed from scratch, using Arduino compatible modules and 3d printed parts.

Real Time MRP (Material Requirements Planning)

2014 - 2016

- Software application for tracking material requirements and usage in manufacturing operations.
- Based on PostgreSQL and desktop clients built using Python3

Cheap AOI system for electronics manufacturing

2006 - 2007

- AOI (Automated Optical Inspection) system using an of-the-shelf flatbed scanner for image acquisition, programmed as a desktop application in C#.
- Fiducial mark detection for image position correction.
- Components presence/absence detection.

Home PBX system

2001 - 2002

- Small PBX system with individual user accounts and usage metering.
- Based on Microchip PIC16 microcontroller, programmed in assembler and finally rewritten in C.
- Complete hardware and firmware design.

SKILLS

- Seasoned software developer, proficient in several languages and platforms.
- Excellent engineering skills. Analytical thinking, with fundamental knowledge of data, processes, statistics, probability and math.
- Highly sociable, good at interacting with coworkers and customers.
- Excellent communication ability, both oral and written. My mother tongue is Spanish, but I can speak English fluently.
- Linux administration at a medium level.