

Ian L. Rodrigues

CONTACT



+55 19 99899 5021



ian.liu88@gmail.com



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EDUCATION

- 2018 Apache Spark 2 with Python
Udemy
- 2018 The Node.js Master Class
pirple.com
- 2014 Introduction to Machine Learning, with Andrew Ng
Coursera
- 2006 → 2010 Bachelor of Science in Computational and Applied Mathematics
University of Campinas
- 2009 Summer School at LNCC
National Laboratory of Scientific Computing

EXPERIENCES

- 11/2018 → 01/2019 **Data Engineer Consultant @ *ViajaNet***
Data Engineering consulting for the travel agency company *ViajaNet* to help them build an Extract Load Transform (ETL) system using Python and Google Cloud. The system uses Python to extract flight tickets pricing information from a FTP server, and Python Pandas to transform the data and load it into a PostgreSQL database. All components of the system were deployed with Docker containers.
- 10/2018 → 11/2018 **Data Engineer Consultant @ *nG Solutions***
Data Engineer Consulting for *nG Solutions* (telecommunication company) to help them build an Extract Load Transform (ETL) system using Python and C++. The system extracts data from legacy terminals by simulating an interactive environment with pseudoterminals (PTY).
- 06/2017 → 09/2018 **Data Engineer @ *Olivia AI***
Develop Extract Load Transform (ETL) systems with NodeJS on AWS Cloud for an personal finance advisor app. I also created a Python Jupyter Lab Cluster to analyse financial data with technologies like Python Pandas, PySpark and Scikit Learn. Developed classification models, forecast models, and recommendation systems with Scikit Learn.

- 06/2013 → 06/2017 **Software Engineer @ *Cepetro***
Develop Seismic Processing algorithms as part of a Petrobras project. Worked with Distributed Computing and High Performance Computing. The goal was to develop highly optimized algorithms in C++ to process seismic data ranging from 1 Gigabyte to several Terabytes, and fully utilize a cluster of more than 2,000 machines by distributing the tasks with Python. Published and presented papers in several Oil & Gas conferences.
- 01/2009 → 01/2013 **Software Engineer @ *GêBR Project***
Develop a Graphical User Interface for Seismic Processing as part of a Petrobras project. The program aims at the academic community for research & development purposes, and integrates with big computational clusters. The technologies used were C, GTK+, Sockets Programming, Python, and a little bit of JavaScript.
- 01/2009 → 07/2009 **Freelance Software Engineer @ *Skedio Tec.***
Develop a Graphical User Interface with Python and GTK+ to interact with a concrete moisture probe through the RS232 Serial port.
- 04/2007 → 06/2008 **Software Engineer @ *IgnisCom***
Develop a game for educational purposes with Macromedia Flash and Action script.

PUBLICATIONS & SIDE PROJECTS

- 2018 **Bug fix on Python's core library**
While working on the ViajaNet project, I've found a bug on the core `ftplib` library. I then issued a bug report to Python's bug tracker and created a Pull Request on github to mitigate the issue.
⇒ <https://github.com/python/cpython/pull/10520>
- 2018 **Cognitivo AI selection process**
A simple web application that loads CSV data into a PostgreSQL, using Python and `sanic` library to build a REST API. This project was part of the selection process of Cognitivo AI, a platform that connects clients needing Data Science demands with developers and data scientists. I've been selected to do the ViajaNet consulting.
⇒ <https://gitlab.com/fooliu/teste-cognitivo.ai>
- 2017 **Pyme**
A Python library to read and manipulate SEG-Y Seismic files
⇒ <https://github.com/hpg-cepetro/pyme>
- 2016 **PY-PITS: A Scalable Python Runtime System for the Computation of Partially Idempotent Tasks**
⇒ <https://ieeexplore.ieee.org/document/7803668>

- 2013 **Enabling large data processing with the 3D ZO CRS Stack software**
⇒ https://wit.cen.uni-hamburg.de/fileadmin/user_upload/wit/reports/2013/WIT2013-Borin.pdf

PRESENTATIONS

- 2015 Presented “Efficient and Fault Tolerant Computation of Partially Idempotent Tasks” on the Intel Tech Teather, at Rio de Janeiro, Brazil
- 2014 Presented “Enabling Large Data Processing With the 3D ZO CRS Stack Software” on the WIT Annual Report, at Hamburg, Germany
- 2011 Gave a GêBR Workshop on the 2011 SBGf International Conference, at Rio de Janeiro, Brazil
- 2009 Gave a GêBR Workshop on the 2009 SBGf International Conference, at Bahia, Brazil

LANGUAGES

- Portuguese** Native language
- English** Advanced
- Spanish** Basic