

HEITOR CHANG

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PROFESSIONAL EXPERIENCE

Mediafly, Inc., Chicago, IL (Remote)

Senior Software Engineer, Data and Client Squad

Aug. 2022 – Feb. 2023

- Developed Kotlin code to expand the back-end customer integration with Salesforce's API to enable the creation of custom objects holding metadata.
- Improved the Python video call processing pipeline to filter out unwanted blocks of silence.
- Corrected multiple occurrences of temporary files not being cleared in the Python pipeline code.

Tempo OK Tecnologia em Meteorologia Ltd., São Paulo, SP

Senior Full-Stack Developer

June 2020 – Aug. 2022

- Built and administered the public-facing website with Django, including custom user management and authentication with a JWT extension.
- Architected a PostgreSQL database in Google Cloud Platform to store meteorological observation and forecast time series at client-supplied locations and government-operated stations.
- Built FastAPI endpoints to communicate with a PostgreSQL database using Google Cloud Functions and Cloud Run, leveraging Docker containers and Bitbucket's Continuous Deployment pipeline.
- Created a geospatial dashboard containing satellite imagery overlays computed from NASA's scientific data and weather stations' historical data, obtained by accessing their public APIs.
- Created a hydroelectric energy forecasting dashboard containing Google Maps and Apache ECharts widgets in Vue.js and the Vuetify Material Design front-end framework.

Pontual Export & Import Ltd., São Paulo, SP

Full-Stack Developer

Jan. 2014 – June 2020

- Used MA (Moving Average) indicators in a Django and Python project to predict the demand for 600 products and calculate appropriate amounts for restocking.
- Prepared sales forecasts and summarized business-critical statistics in a Django app.
- Created a REST API with the Slim micro framework in PHP to be consumed by a React app that rendered the company's website.
- Visualized historical sales with NumPy and Pandas, reporting totals and outliers for each product.
- Created a Single-Page App with AngularJS and Firebase to organize product reservations by clients and their assigned salesperson in real-time.

EDUCATION

Stanford University, Stanford, CA

M.S. in Materials Science and Engineering

GPA 3.6/4.0

Sept. 2005 – June 2007

B.S. in Mathematical and Computational Sciences

GPA 3.7/4.0

Sept. 2001 – June 2005

- Fluent in **English** and **Portuguese**. Basic knowledge of **Mandarin**, **Italian**, **French**, **Spanish**, and **Greek**.
- Advanced knowledge of **Python**, **JavaScript**, and **HTML**.
- Intermediate knowledge of **PostgreSQL** and **CSS**.
- Basic knowledge of **Scheme**, **Java**, and **Kotlin**.