HEITOR CHANG

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PROFESSIONAL EXPERIENCE

MEDIAFLY, INC., CHICAGO, IL (REMOTE)

Senior Software Engineer, Data and Client Squad   *Aug. 2022 – Feb. 2023*

- Extended a Python back-end service handling customer integration with Salesforce's API to allow the creation of new custom objects holding metadata.

- Improved the Python video call processing pipeline, filtering out unwanted blocks of silence.

- Corrected multiple occurrences of temporary files not being cleared and other data inconsistencies 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

NEW YORK UNIVERSITY, NEW YORK, NY

M.S. in Financial Mathematics, 2009

STANFORD UNIVERSITY, STANFORD, CA

M.S. in Materials Science and Engineering, 2007
B.S. in Mathematical and Computational Sciences, 2005

PERSONAL PROJECTS

- *Alexie Beans* – A Django app implementing double-entry accounting rules, used for managing personal finances and budgeting.

- *Polylexis* – A Django app containing Greek vocabulary quizzes and a built-in dictionary.

- *Cooking Diary* – A vanilla JavaScript app that records which dishes were consumed daily, including the ingredients making up each dish.

SKILLS

- Fluent in **English** and **Portuguese**.

- Rudimentary knowledge of **Mandarin**, **Italian**, **French**, **Spanish**, and **Greek**.

- Advanced knowledge of **JavaScript**, **Python**, and **HTML**.

- Intermediate knowledge of **PostgreSQL**, **Django**, **React**, **Vue**, and **CSS**.

- Basic knowledge of **Scheme** and **Java**.