Julius Hernandez-Alvarado aka J Hernandez

Fullstack Web & Data Engineer

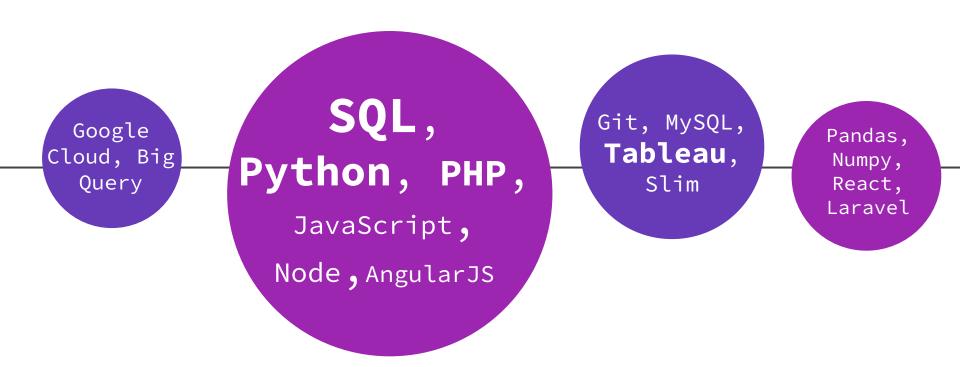
About my experience:

Most of my work at Redstone Print & Mail was proprietary so I am not able to share code, but I'll describe the major projects I worked on there.

While unemployed from July'2020-Dec'2020 I spent 90% of my time learning. In January 2021 I started working as an Contractor at Apple through Advantis Global.

I also switched from PHP as my primary scripting language to Python. However, I do prefer SQL over PHP & Python.

Tech Stack



Professional Projects

Cost Estimation software

May'2018-Jun'2020 Redstone Print & Mail full-time employee

Problem

Our accounting team used an internal cost matrix to estimate the cost of jobs, doing this to 1,500 jobs a month took a team of 4 accountants about 2 weeks.

Solution

I translated the cost matrix to PHP & SQL code and automated job scanning to compute costs.

Outcome

Cost estimating went from 2 weeks to 1.5 seconds

Mailing Software Comparison Scripts

May'2018-Jun'2020 Redstone Print & Mail full-time employee

Problem

There is tons of mailing software. Each gets different results. Each does verification. More verifications means we can send more mail.

Solution

I wrote PHP scripts to compare the XML, PDF, JSON, TXT, and CSV results of each mailing software.

Outcome

A 1.4% increase in mail sent. We sent millions of pieces of mail.

File Downloader bot

May'2018-Jun'2020 Redstone Print & Mail full-time employee

Problem

We had over 2,000 customers.

Many had "secure data storage"
where we had to go to download
their data. Downloading hundreds
of files a day took 2-4 hours.

Solution

I built a bot on Node.js using Google Puppeteer.

Outcome

Downloading files went from 2-4 hours to 1-2 mins.

Inventory to Accounting **Transformer** data app

May'2018-Jun'2020 Redstone Print & Mail full-time employee

Problem

Our Inventory software exported data in a format QuickBooks did not understand. Without it, the accounting team could not verify purchase orders automatically

Solution

I built a CLI app to do formatting & field calculations so QuickBooks could understand the data.

Outcome

A seamless inventory software data to QuickBooks import.

USPS Zone Chart Matrix statistical computing

May'2018-Jun'2020 Redstone Print & Mail full-time employee

Problem

Each job has thousands of addresses. Knowing the distance of each address to its' destination post office can MASSIVELY reduce costs.

Solution

I used PHP to compute the "average zone distance per piece per job group" statistic & used this stat to render graphics a human could analyze.

Outcome

MASSIVE decrease in shipping costs.

There were many other projects I did at Redstone, here is a summary:

- Inventory cost per supplier data scraper bot in Node.js,
- Linux to Windows 10 Server API in C#
- 'Cost per supplier' per 'supplier location' per 'production facility' in SQL,
- Permutation of jobs that could be automated using Combinatorics & Excel,
- DMV data extractor in PHP,
- Customer permit 'info scraper' in xBase,
- Microsoft Excel automation in PHP & Basic,
- Cost Estimate data visualizations in PHP,
- Sales Rep sales & commissions statistical computing in PHP,
- 'Internal web app' vs 'external inventory software' counts audit in PHP & SQL,
- A cloud app to train our Customers to use excel in PHP & AngularJS,
- ... and many more! (: This job was so fun, I hate that the coronavirus happened

Contact

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GitHub:

https://github.com/ideaguy3d

"1 person can make a difference, and every person should try" -JFK

