

Curriculum vitae

Personal data

Name: Michael H.

Technical Knowledge and Skills

Python, Django



Michael is an experienced back-end Python developer, he has been working in the IT industry for almost 20 years. He took part in numerous international projects, and has proven experience in building complex software solutions using Django and Flask.

Education

Starkville, United States
Mississippi State University

Work experience

May 2019 -
Present

Independent Contractor, Remote
Full Stack Developer

Stack:

- Python/Flask
- Vue.js
- PHP, jQuery
- AWS

Project and Responsibilities:

- Developed companion web interface for an Android point-of-sale application using Vue.js front-end, with



Python/Flask back-end. Communicated with Clover for payment and sale details using REST API with OAuth authentication.

- Migrated PHP/JQuery based web application and associated databases to client servers after acquisition.
- Minimized downtime and impact to customers for business-critical application processing more than \$3 million in transactions in 2019.
- Developed desktop application for digital display that rotates videos when donations occur on attached payment kiosk. Application written in Python, messaging via AWS SQS.
- Established and customized an instance of Zoho Projects for Nashville Erosion Control, a construction industry client. Provided custom integrations written in Python using Zoho REST API to automatically input jobs from builder sites. Data obtained by web-scraping using Selenium and parsing PDFs received via email.
- AWS administration, software debugging assistance as needed.

November 2017 -
May 2019

Software Development Company, Remote
Software and Database Developer

Stack:

- JavaScript
- TypeScript
- AngularJS
- NodeJS
- MongoDB
- ElectronJS
- Alibaba Cloud

Project and Responsibilities:

- Designed and developed internal tools using Python and PHP to automate customer pre-qualification and provisioning. Customer addresses were geocoded using an external REST API and compared to RF Projection data using Python GIS tools. Customer premise equipment was provisioned using Radius or TR-069 depending on equipment model and coverage



area.

- Deployed field installer job management system, RazorSync. Integrated customer provisioning and billing system via using Python to pull / push data from other systems into the RazorSync REST API.
- Using EDX Signal Pro, developed radio frequency coverage models based on prospective tower location, RF hardware configuration and available spectrum.
- Compared RF models against a database of known potential customer residential location. Customer data was stored as geographic type data points in MS SQL Server. Integrated with RF modelling application using their Win32 COM interface called from a Python application.
- Performed extensive ad-hoc reporting with custom SQL Queries. Recurring reporting done in SSRS.

June 2009 -
November 2017

Informational Technology Company, United States
Director of IT

Stack:

- JavaScript
- TypeScript
- AngularJS
- NodeJS
- Ionic
- AWS

Responsibilities:

- Designed and built internal tools to provide self-service and automated reporting to internal clients. Reports were either provided via email using SSRS or via web using Python/Flask.
- Developed billing process automation using VBA in Excel interfacing with Microsoft SQL Server data source to allow administration staff to generate invoices in minutes rather than hours.
- Created ad-hoc reports using custom SQL queries, as needed, to assess agent, program, and overall business performance.
- Maintained and enhanced existing PHP customer web portal to display partner sales information and call handling statistics in real-time. Both sale information



and call handling data were stored in MS SQL databases.

- Integrated with vendor back-end systems using SOAP API from Python applications.
- Planned, implemented and maintained network and telephony systems as employee count grew by more than 300% and business expanded to a second physical location.
- Managed technology services provided by third-party vendors.
- Provided after-hours and weekend support, as needed, to address business-critical issues. Worked proactively with vendors, carriers and staff to minimize service interruption during business hours (18 hours a day, 365 days a year).
- Attended Dish Network internal trade shows to meet with vendors, customers and partner organizations.

August 2008 -
June 2009

Informational Technology Company, United States
Director of IT

Stack:

- PHP
- MySQL
- Python

Projects and Responsibilities:

- Maintained network, data and telephony systems for administration, billing and support.
- Remotely managed servers providing caching, traffic shaping and user access control for Skyway USA internet service.
- Created self-service dashboard for customer bandwidth usage monitoring. Written in PHP with usage data in MySQL database. Data gathered from remote systems via Python scripts using FTP.

April 2004 -
August 2008

Informational Technology Company, United States
Professional Service Developer, Support Team Member

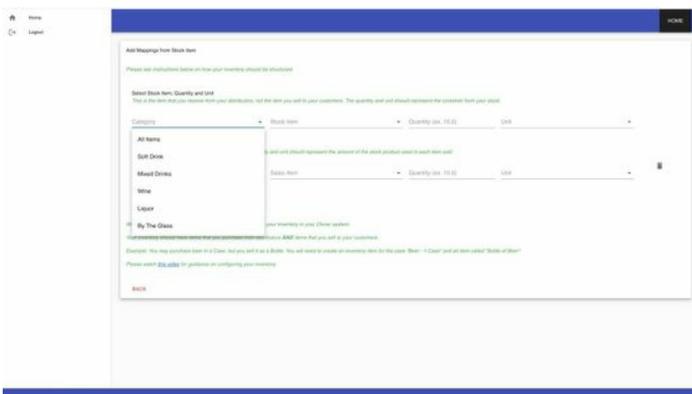
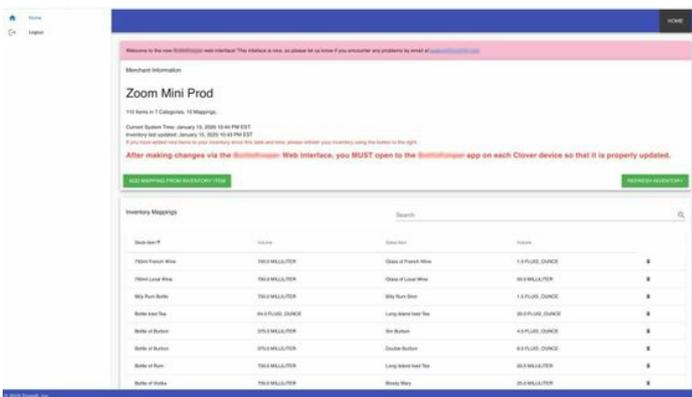
Stack:

- PHP
- T-SQL
- VBScript

Projects and Responsibilities:

- Assessed business needs, technical requirements and negotiated quotes for customizations to billing and help desk software products.
- Developed customizations for billing and help desk system and associated web packages using PHP, VBScript, T-SQL, and Crystal Reports.
- Travelled for on-site software training and implementation.
- Hired and trained a 4-person technical support team.
- Aided support members on escalated and more involved technical support issues.

Portfolio



Point-of-sale app development company
June 2019 - August 2019

One of my more recent projects is a web interface for an Android-based point of sale application for handling inventory of alcohol used in mixed drinks. The goal of the project was to allow the app's users to set up mappings between sales items (such as cocktails) and specified quantities of inventory items (such as the constituent alcohol). The web application stored information in the POS system inventory using the POS vendor's API. The Android-POS application was already in production. I develop the project from the specifications, doing both back-end and front-end.

Technologies used:

Python, Javascript, Vue.js

Regional Wireless Internet Provider

November 2018 - February 2019

I was involved in a number of projects. The two most recent are described below.

The first project's goal was to develop a customer prequalification portal that allowed employees to geolocate a customer based on their submitted address details and check those coordinates against a digitized map of radio tower coverage. This tool serves as a guide for the sales team when signing up new customers, so as not to waste resources on unneeded site surveys. I served as sole developer for this project. This application is for internal use, no screenshots are available.

The second project's objective was to allow staff members to view and schedule customer service and installation appointments of varying lengths, number of crew members, and different vehicles for different tasks. The application communicated with the CRM system as well as the field service management app used by the field staff. I served as the sole developer for this project. This application is for internal use, no screenshots are available.

Technologies used:

Python, Javascript

Sales and Marketing Call Center

June 2016 - October 2017

Due to the duration of my employment from 2009 to 2017, I worked on a large number of smaller projects amid other non-development duties. The three largest projects are described below.

The first project served to allow staff members to record information about sales of home security services on behalf of one of our national sales partners. The application allowed the



agent to enter customer information, including information necessary to perform a credit check, and submit that information to the home security vendor. Based on that customer's financial qualification, the salesperson could choose the selected package after discussing it with the customer. Once the information was saved, non-sensitive information was stored in a local database for reporting, while the complete order information was submitted to the vendor's system for provisioning and installation.

The second project served as a reporting dashboard for the call center management. Relevant metrics regarding sales agent performance and call queue times were displayed on a convenient web app based on the call center management's specifications.

The third project was the automation of invoice generation based on sales information stored in the business CRM. Invoices were previously generated by management manually in excel based on the previous month's sales metrics and details. The new application automatically generated base invoices (in .xls format) and dramatically cut the time needed for management to verify and send out the invoices.

Over additional projects, I used Django any time auth, user management or an admin interface was needed. I served as the sole developer for all three projects. No screenshots are available.

Technologies used:

Python, Django, Javascript