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## EMPLOYMENT

### Data Engineer

#### Python Developer

**EOG Resources Inc**

**March 2022 - Present**

- Designed and built scalable REST API using FastAPI framework for multiple applications
- Designed databases in MemSQL and MongoDB to support multiple applications while also creating tables, views, procedures, and indexes to support fast and efficient data retrieval
- Created and managed a CI/CD pipeline to deploy microservices to Kubernetes from GIT
- Designed and built ETL pipelines using Airflow; Scheduled and created jobs on Airflow to run python scripts to meet application needs
- Served as the primary backend developer for multiple applications; Worked with product managers, clients, and front end teams to meet all application specifications

#### Python Developer

#### Electrical Engineer

**STP Nuclear Operating Company**

**April 2020 – Mar 2022**

- Utilized python to perform data analysis on cathodic protection rectifiers to identify and resolve issues with unsatisfactory outputs
- Created and automatically managed a database with all rectifier readings utilizing SQL and Python Scripts.
- Overhauled the cathodic protection and cable testing program to achieve Nuclear Regulatory Commission and NACE requirements while reducing costs by over 30%.
- Served as the subject matter expert and owner for the cable testing and cathodic protection programs.

#### Port Operations

**Tenaris**

**October 2018 – April 2020**

- Leveraged Python programming to extract, write and perform functions on excel spreadsheets.
- Performed web scraping with python to extract data from container shipping websites to update on all necessary import information.
- Utilized Share Point, Excel, and web scraping techniques to create a live database of all active container shipments, which is able to constantly update and inform multiple parties via email on vessel changes, customs status, and container pickups/returns.

#### Electrical Engineer – Part time

**Fruition Technology Labs**

**July 2018 – April 2020**

- Prototype design and development of Atmospheric Water Generator.
- Programmed Arduino board to take inputs from various sensors and output data.
- Performed electrical testing and design upgrades using LTSpice

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## EDUCATION

#### Houston, TX

**University of Houston**

**August 2012 – December 2016**

- Bachelor of Science, Electrical Engineering

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## TECHNICAL EXPERIENCE

### Projects

- **Property Web Scraper** - Python script which would take a zip-code input and return an excel sheet with all properties for sale in that area along with their descriptions. Add-on was for entry into SQL database.
- **Follow-Me Bot** - Developed "Follow-Me Bot" robot that assisted users in transporting lightweight items. Designed power system utilizing LTSpice, leveraged object-oriented programming in microcontroller using C and C#; implemented IR and Ultrasonic sensors as well as Xbox Kinect.
- **MATLAB Speech Processor** - Converted sound signal input from male or female to output that matched sex of speaker; utilized MATLAB and applied digital signal processing techniques, including Sampling and Fourier Transform to complete this program.
- **OCR Recognition** – Created a python script utilizing Tesseract and OpenCV to convert a stream of printed

text images to machine-encoded text. Converted text was sent to a live digital distribution platform.

- **Personal website** - <https://www.jhangirawan.com/> - built using python and Django.

#### **Languages and Technologies**

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- Python; C; SQL; JavaScript; HTML; CSS
- MemSQL, MongoDB, Airflow, FastAPI, Django, Flask, Pandas, Docker, GIT, Kubernetes