

## EXPERIENCE

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### • BTJN, LLC

*Data Specialist*

Houston, TX

*May 2021 - Present*

- **Application Development:** Developed Python web scraping application to programatically produce 10,000 unfiltered sales leads weekly.
- **ETL Pipelines:** Transformed, filtered, and loaded data from CSV, JSON, and Excel formats to Neo4j and JanusGraph databases. Integrated data into client's existing Google Sheets workflow with custom Google API class.
- **Business Reporting and Sales Predictions:** Modeled retail sales with the SARINA, Holt-Winter, and Exponential Smoothing models in Python and Jupyter Notebooks. Identified model of greatest predictive power with the Mean Absolute Percentage Error formula.

### • University of Central Florida

*Research Lead*

Orlando, FL

*Jan 2017 - Aug 2019*

- **Research Design:** Ensured rigor of data collection methodology by meeting industry best practices.
- **Database Design:** Defined a third normal database to maintain logical consistency. Refined schema to facilitate porting to person, object, location and event (POLE) schema.
- **Data Integration:** Standardized integration procedures to verify integrity of files generated by research assistants. Transformed data from Excel and CSV sources into JSON format to index into a noSQL database.
- **Data Analysis:** Analyzed conflict data with Pandas. Visualized data trends with Matplotlib. Exported visualization and data to Excel. Prepared presentation for peer review at the Peace Science Conference at the Hague, Switzerland.
- **Project Management:** Developed manuals to train inexperienced research assistants to query primary sources and code data points. Led team to achieve project goals prior to deadlines defined in our grant.
- **Human Rights Abuse Frame Work:** Aggregated corpus of international human rights law to cross reference with abuse events.

### • University of Central Florida

*Research Assistant*

Orlando, FL

*Jan 2017 - Jan 2018*

- **Data Integration:** Aggregated data points generated by student research assistants into database with Python.
- **Automated Sentiment Analysis:** Compared user scored sentences to programmatic scoring to identify errors.

## PROJECTS

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- **Business Analysis:** Forecasting and analysis projects.
- **Political Analysis:** Conflict, behavioral, and political analysis.
- **Machine Learning:** Machine learning for political analysis.
- **Web Scraping:** Web scraping projects to procure data.
- **Data Integration:** Data Integration and transformation scripts.
- **Google Drive API:** Google API application to upload JSON data to remote Google Sheets.
- **Sphinx Documentation Template:** Tutorials and templates to create Sphinx and Jupyter Book publications

## SKILLS

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- **Technologies:** Graph Database, Jupyter, LaTeX, Matplotlib, Pandas, Python, SAS, SPSS, SQL, TensorFlow.
- **Data Modeling and Analysis:** Sales Forecasting, Political Analysis, Business Analysis, Data Visualization.
- **Spoken Languages:** Cantonese, English, French, Spanish.

## EDUCATION

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### • University of Central Florida

*Bachelor of Arts in Political Science*

Orlando, FL

*August 2018*