Tim Claytor: Data Science | Python | R | SQL

Nashville, Tn

EXPERIENCE

Nashville Software School, Data Scientist — *Apprentice*

AUGUST 2022 - PRESENT

Intensive part-time bootcamp focusing on data science fundamentals and problem solving. Used real-world datasets and included projects where findings were presented to stakeholders from the community.

- Wrangled data and performed exploratory data analysis using Python's pandas library and R's tidyverse packages
- Created data visualizations using matplotlib, seaborn, and ggplot2
- Performed geospatial analysis using geopandas and folium
- Gathered data through APIs and web scraping.
- Used PostgreSQL to formulate queries that explored, merged, and manipulated data through several tables.

Williamson County Schools, Student Support Services — Special Education Teacher and Math Interventionist.

SEPTEMBER 2012 - PRESENT

- Specialize in children with social/emotional disabilities, autism, and ADHD.
- Write detailed and legally binding data-based educational plans and reports.
- Regularly collect, analyze, and present data-based findings to interdisciplinary teams.

Robertson County Schools, Special Education Teacher — *Interventionist for Students with Severe Social, Emotional, and Behavioral Disturbances.*

AUGUST 2009 - JUNE 2012

- Educator and behavior interventionist for students with severe emotional disturbances.

PROJECTS

Web Scraping — *An Analysis of Political Contributions*

Used Python (Beautiful Soup, Requests, lxml, Pandas, and Datetime) to scrape and analyze national data related to the 2020 House of Representatives election from the website "opensecrets.org."

APIs — *Analyzing Aggravated Burglaries in Davidson County*

Used Python (APIs, Pandas, GeoPandas, Shapely, and requests) to acquire, spatially join, and analyze data from local law enforcement datasets and national census datasets.

***Outside Partner Project** - Vanderbilt's ACCRE Computer Cluster*

CONTACT

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Python | Exploratory Data Analysis using Pandas, MatPlotLib, Numpy, and Seaborn.

R | Exploratory Data Analysis using Tidyverse packages (ggplot2, dplyr, tidyr, readr). Data dashboards with R Shiny.

Web Scraping & APIs | HTML parsing with BeautifulSoup and Requests libraries. Retrieving data via API calls.

SQL | PostgreSQL, queries to manipulate, merge, and analyze data.

Teaching | Professionally Licensed k-12 Special Education Teacher.

Project Management | Coordinate and lead interdisciplinary teams to collect, analyze, and interpret data to drive decision making.

Resource Usage Analysis.
Used Python (Pandas, Numpy, Matplotlib, and Statsmodels) to analyze, visualize, and report user and group resource usages for Vanderbilt's Advanced Computing Center for Research and Education.

***Outside Partner Project** - Affordable Housing Economic Impact Analysis for Davidson County Metropolitan Development and Housing Agency*.
Using R (GGplot2, Tidyr, Dplyr, Readr, Stringr, and SF) Analyzed the economic impact of affordable housing projects on the market value of nearby houses, presented findings to stakeholders.

***Personal Midcourse Capstone Project** - COVID: Tennessee Learning Loss and Recovery.*
Using R Tidyverse packages and R Shiny Dashboard, I acquired, merged, cleaned, and analyzed 4 years of district-wide achievement assessment results for all counties in Tennessee. The purpose of this project was to measure the learning loss impact that occurred during the pandemic and how each school district recovered from those losses.

***Outside Partner Project** - Capturing referrals between healthcare providers based on Medicare claims in the Nashville area*
Captured healthcare provider referrals based on Medicare claims in Nashville using Hop Teaming, NUCC, NNPES, CBSA, and NPI datasets with Python (Pandas, NumPy, Matplotlib). Used Louvain algorithm to identify provider communities and custom filters to determine specialists for Vanderbilt Hospital outreach. Provided insights into provider networks and expanded patient volume.

***Outside Partner Project** - Big G Express: Predicting Derates project:*
Used fault code data and vehicle onboard diagnostic data to predict full derates in order to prevent costly truck towing expenses for Big G Express. Conducted significant feature engineering and cleaning tasks. Focused on significant SPN codes which provided insights into engine torque reduction and idle level derates. this analysis aimed to minimize towing costs and improve operational efficiency for Big G Express.

EDUCATION

Nashville Software School, Nashville, TN — *Data Science Certificate*
June, 2023

Lipscomb University, Nashville, TN — *Ma.Se. Master's of Arts in Special Education*

Middle Tennessee State University, Murphreesboro, TN — *Bs. Psychology and Behavior Research*