Allyson Talyor

Indianapolis, IN 46220
Email: allysontalyor@gmail.com | Phone: 317-331-2898
LinkedIn: www.linkedin.com/allyson-talyor | GitHub: https://github.com/allysontalyor

---

Data Analyst with a background in chemistry (B.S. and Ph.D.) and skills in Excel, Python, SQL, JavaScript, and Tableau from Butler University Data Analytics and Visualization Bootcamp. Detail oriented with the ability to extract important information from large data sets and create clear and creative visualizations. Recently completed a project in a team of three using data sets from eig.gov, Python, JavaScript, SQL, and Flask to visualize changes in the consumption of renewable energy sources in the United States from 1960 to 2017. Strengths including strong technical and problem solving skills, the ability to learn quickly and independently, and collaborating successfully in diverse groups, makes me a valuable addition to any team.

TECHNICAL SKILLS

Tools: Microsoft Excel, VBA, Python, Pandas, NumPy, SQL, noSQL, JSON, HTML/CSS, Beautiful Soup, JavaScript, D3.js, Plotly, Leaflet, R, Tableau, Apache Hadoop, Machine Learning, GitHub, Big Data, Statistics; **Databases:** MongoDB, Postgresql; **Other:** Flask, Git, Command Line

PROJECTS

Indianapolis Housing Market Predictor
Code: https://github.com/allysontalyor/Indianapolis_Housing_Market_Predictor
Housing data, compiled monthly, from Marion County, Indiana was analyzed to reveal trends in the housing market (Zillow data was obtained from Quandl). Then a machine learning model using a neural net was created to predict housing prices for 2020 using the inputs of zip code, number of bedrooms, and month of purchase. Key tools: Python, TensorFlow, Sklearn, HTML/CSS/Bootstrap, Tableau.

Energy Consumption in the United States
Code: https://github.com/allysontalyor/Energy_Consumption_U.S.
Energy data (obtained through eia.gov), was used to visualize trends in the consumption of energy in the United States by sector (industrial, commercial, residential, and transportation). Energy consumption by type (biomass, coal, natural gas, hydroelectric, etc.) , was then evaluated over time, and by geographic region. Key tools: Python, Flask, SQL, Javascript (Plotly, D3, and Toast UI), HTML/CSS/Bootstrap.

WORK EXPERIENCE

Assistant Professor August 2010 - May 2013
University of Indianapolis, Indianapolis, IN
Taught all levels of general chemistry (CHEM 150,151,160,161,100) and advanced analytical courses including CHEM 310 (Quantitative Analysis) and CHEM 400 (Advanced Lab Techniques).

- Accepted a tenure track position after seven months in the role.
- Student advisor for two major tracks.
- Assisted in individual student research projects including analysis by GC, HPLC, and UV-vis.

Experience Continued

Product Support Scientist November 2007 – August 2010
Roche Diagnostics, Indianapolis, IN
Provided technical support for a line of immunoassay reagents in Roche's Centralized Diagnostics division. Responsibilities included assisting in the titering of reagent batches using Roche hospital analyzers, writing deviations for process failures in manufacturing and regulatory work involving the re-validation of products for FDA approval.

- Proficient in the use of both Cobas Integra and Hitachi analyzers.
- Legacy Validation project completion resulting in the lifting of an FDA warning letter.

EDUCATION

Butler University, Indianapolis, IN 2020
Data Analytics | Visualization Certificate
A 24-week intensive Boot Camp program focused on gaining technical programming skills in VBA, Python, Plotly, R, JavaScript, D3, SQL Databases, Tableau, Big Data, and Machine Learning

Purdue University, West Lafayette, IN
Doctor of Philosophy - Analytical Chemistry
Dissertation Advisor: Dr. David Nurok
Dissertation: Apparatus Development and Results for Pressurized Planar Electrochromatography

Bradley University, Peoria, IL
Bachelor of Science - Chemistry

PUBLICATIONS

Nurok, D., Koers, J.M., Novotny, A.L., Carmichael, M.A., Kosiba, J.J., Santini, R.E., Hawkins, G.L., Replogle, R.W. *Apparatus and Initial Results for Pressurized Planar Electrochromatography.* **Analytical Chemistry**, 2004, 76, 6, 1690–1695.

Novotny, A.L., Nurok, D., Santini, R.E., Hawkins, G.L., Replogle, R.W. *Results with an Apparatus for Pressurized Planar Electrochromatography.* **Analytical Chemistry**, 2006, 78, 8, 2823–2831.

Novotny, A.L., *Report on Papers at the Symposium "Planar Chromatography 2004"* ***Journal*** **of Planar Chromatography**, 2004.