

Erin James Wills

Data Specialist

PERSONAL INFORMATION

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 @erin-wills

 @ejw-data

FORMAL EDUCATION

Northwestern University – Chicago, 2020
Data Analytics & Visualization Certificate

- Over 240 hours in-class and 240 hours outside-class learning Python, JavaScript, SQL, R, Tableau, Machine Learning, and more.

University of Tennessee – Knoxville, 2013
MS Education Theory and Practice

- One Year Teaching Experience
- Action Research: Student Cognition of Models
- Researched Engineering and Learning Styles

Purdue University – West Lafayette, 2007
BS Chemical Engineering
Minor Political Science

- Eastman Chemical Co-op (20 mo.)
- Nat'l Corn-to-Ethanol Center Intern (3.5 mo.)

TECHNICAL SKILLS

Strong

MS Office, Adv. Excel, PostgreSQL, SQL, Git, HTML/CSS, Python, Pandas, NumPy, Matplotlib, Flask, SQLAlchemy, BeautifulSoup, Scikit Learn, JIRA, Adobe InDesign, PhotoShop

Intermediate

JavaScript, R, Tableau, Matlab, SPSS

For more project examples, please view my GitHub: <https://github.com/ejw-data/>

Multi-faceted data specialist with ambitions of becoming a full-stack data scientist. Passionate about investigating the intricacies of datasets to find valuable information and using the insights from 10+ years of engineering and research experience to find innovative and actionable solutions. Independent doer – highly skilled in data wrangling, ETL, visualization, validation, and modeling.

PROFESSIONAL EXPERIENCE

Northwestern University Data Science Bootcamps – Chicago, IL
Teaching Assistant, June 2020 – Onward

- Evening and weekend student support for Python, Web, Tableau, R

Northwestern University – Evanston, IL

Therapeutics Research Center Program Coordinator, Aug. 2018 – Present

- Redesigned the organization's website to be more consistent and user friendly.
- Modified data tracking methods to allow for database integration and retention.
- Provides IT support and technology development for the group.

University of Tennessee – Chicago, IL

Education and Technology Consultant, Sept. 2017 – Sept. 2018

- Validated database and generated annual reports for NSF funding reviews.
- Trained administrative staff to collect and analyze data.

University of Tennessee – Knoxville, TN

CS/EE Dept. Education Coordinator, May 2013 – Aug. 2017

- Developed education programs to increase student involvement in computer science and electrical engineering curriculum and research. Led to 7x precollege involvement, 4x undergraduate involvement, and 70% graduate student enrollment increase.
- Created power and energy projects, organized events involving 20+ collaborators, and tracked 200+ members and their accomplishments.

Innovative Controls Inc. – Knoxville, TN

Automation Engineer Consultant, Jan. 2010 – Feb. 2011

- Designed the entire documentation, process logic, and testing methods for a newly constructed industrial polymer facility using Siemens PCS7/Batch (Fortune 100 client).
- Worked directly with clients during project scoping, development, and implementation.

BASF Corp. – Geismar, LA

Operations Engineer, May 2007 – Feb. 2009

- Member of small team tasked with the startup of four chemical plants in one year. Developed significant portions of the processing logic and was the startup lead for one facility and process advisor for the final startup - project value of \$150M+.

PROJECTS

Chemistry of Life Processes Website - <https://www.clp.northwestern.edu>

- Redesigned organization website – HTML/CSS/JS/PhotoShop

Rideshare Fare Prediction - <https://chi-ride.herokuapp.com>

- Created Flask app and machine learning algorithm – Bootstrap, MapQuest JS, Google Places/OpenWeather API, D3.js, ML-SGD, ML-Random Forest

Election Dashboard - <https://election-dashboard.herokuapp.com>

- Created Flask app with election data visualizations – Bootstrap, Leaflet, D3.js, Postgres, Pandas data munging

NFL ETL - https://github.com/ejw-data/nfl_etl_project.git

- Combined multiple data sources to create a more comprehensive data source – Pandas data munging, Postgres DB design, data validation

Global Conflicts - https://github.com/ejw-data/social_science_conflict_data.git

- Explored international war data – Pandas, Matplotlib, Seaborn