

# ALEX WALSH | Data Scientist

Naperville, IL · 630-335-4707 · [mail@alexwalshml.dev](mailto:mail@alexwalshml.dev) · [Github](#) · [LinkedIn](#) · [Portfolio](#)

## SUMMARY

---

I am a data scientist with a background in mathematics, scientific data analysis, and physics. I am passionate about learning new techniques to improve the way that organizations and teams use data. I love coming to a deeper understanding of the nature of a dataset, and I believe it is my ethical duty to present the data accurately.

## SKILLS

---

**PROGRAMMING LANGUAGES:** Python, C++, SQL, Bash

**LIBRARIES:** tensorflow, keras, numpy, scipy, scikit-learn, pandas, matplotlib, seaborn, networkx, sympy

**DATA ANALYTICS:** Regression, Decision Trees, Clustering, Classification, Machine Learning, Neural Networks, Time Series Analysis, Optimization, Random Forests, XGBoost, Natural Language Processing

**SOFTWARE:** Linux, Windows, Google Cloud, AWS, Jupyter, Github, Spark

## EXPERIENCE

---

**DATA SCIENCE INSTRUCTOR ASSISTANT**, General Assembly, Remote 02/2023 - Present

- Instructed students in python, machine learning, and data science fundamentals in a fast-paced bootcamp environment with a specialty in mathematical foundations of algorithms
- Broke down complex topics into simple and approachable concepts that students of all skill levels and backgrounds can interpret and understand

**DATA SCIENCE IMMERSIVE FELLOW**, General Assembly, Remote 10/2022 - 02/2023

Successfully completed 500+ hours of expert-led instruction in data science, python, and SQL, and hands-on learning of data science fundamentals and the industry's most in demand technologies.

Developed projects, including:

- **Gasoline Price Prediction** - Applied time series and NLP techniques to forecast average gasoline price in the United States from 2019-2023 with an average error of \$0.035
- **Credit Card Fraud Detection** - Used statistical and supervised anomaly detection to identify cases of fraud in simulated credit card data with a recall of 96%
- **Satire Detection in News Articles** - Applied natural language processing to classify the text content of articles submitted to the subreddits r/TheOnion and r/nottheonion

**MATH AND SCIENCE TUTOR**, Self-Employed, Naperville, IL 06/2021 - 08/2022

- Ensured students K-12 and at the college level understood fundamental concepts of math and science, including algebra, geometry, and physics
- Adapted lessons and approaches for students to successfully teach them in a manner fit for their aptitude, often in multiple ways to better the learning process and achieve optimal results

## EDUCATION

---

**CERTIFICATE, DATA SCIENCE** | General Assembly | Remote 10/2022 - 02/2023

**BACHELOR OF SCIENCE, PHYSICS** | Univ. of Illinois | Champaign-Urbana, IL 08/2015 - 12/2020