

# Melissa Anthony

[decca10.melissa@gmail.com](mailto:decca10.melissa@gmail.com) • 7149-648-6138 • [LinkedIn](#) • Denver, CO

## Summary

With over 15 years of experience as a Data Specialist, I bring expertise in Machine Learning, NLP, and GIS Analysis. My skills include data analytics, dashboard creation, GIS analysis, and technical documentation. I am proficient in Python, SQL, R, and various data analysis tools. I possess strong communication and presentation skills, and I am seeking a role where I can leverage my data skills to improve data systems and drive valuable insights.

### **Quantitative Research Analyst at Xcel Energy**                      Denver, CO (Remote) • 2020 to Present *Data Analytics Professional Specializing in Dashboard Creation, GIS Analysis, & Technical Documentation.*

- Designed, tested, and delivered over 10 concise and accurate dashboards to analysts and executives, funneling optimization into data-driven decision-making.
- Developed and successfully delivered 10 data products, meeting the needs of diverse customers and contributing to revenue growth.
- Analyzed and processed large datasets with millions of records, identifying key customer trends and patterns for strategic insights.
- Utilized GIS analysis to identify and present actionable patterns in meter usage, resulting in improved resource allocation and cost savings.
- Authored and maintained technical documentation for over 100 procedures, ensuring knowledge transfer and efficient workflow within the team.
- Achieved proficiency in Python, R, SQL, Oracle, Databricks, kx, Q language, ESRI ArcGIS, QGIS, SAC, SaS, and PowerBI, utilizing these tools to streamline data analysis processes and enhance decision-making capabilities.

### **Part-time Data Scientist / Analytics Consulting at Cinefuse**                      Denver, CO (Remote) • 2020

- Increase users to a projected 200,000 and user interaction by 125% using Python, AWS, SQL, and machine learning models.

### **GIS Contract Specialist at GeoMega**    Boulder, CO • 2020

- Provide deliverables as well as Python/SQL scripts support to scientists in commercial and litigation mining solutions.

### **GIS Supervisor at CORE Electric**    Sedalia, CO • 2007 to 2018

*Expert GIS Supervisor Driving Strategic Initiatives and Operational Success.*

- Report on metrics to executive-level management that led to the strategic direction of the company.
- Maintained all GIS data for a non-profit electric coop with a territory of over 5,000 sq. miles through 11 counties, with over 160,000 customers.

## Data Science Projects

**Random Forest/Gradient Boost in Vote ensemble:** analyzed 400k SNAP records with 800 features, reduced to 31 columns with 95% accuracy of predicting who will be on SNAP per state to detect risk assessment during COVID. Includes a GIS analysis. <https://www.melissa-anthony.com/help-in-a-snap>

**Neural Network:** Built an image classifier/Artificial Intelligence model to detect people wearing masks or not compared to a twitter scrape of images plotted on a map for prediction of where Coronavirus is spreading. Includes a GIS analysis. <https://www.melissa-anthony.com/behind-the-mask>

**Natural Language Processing:** Used NLP to train a classifier to automatically classify Reddit posts, Scraped social redsits for sentiment analysis to recommend a news site to friends like horror movies. <https://www.melissa-anthony.com/oh-the-horror>

**Regression and other data analyst techniques:** Designed a predictive model leveraging regression techniques to predict house prices.

**Data Management and monthly reporting** on ETL analytics for GIS datasets into several systems based on customer requirements including data sources from CIS, Engineering, SCADA Operations, AutoCAD, cloud data, API, and mobile applications.

## **Skills**

**Data:** Machine Learning, Natural Language Processing, Oracle, Google/AWS, Classification Models, Regression Models, Supervised Models, Unsupervised Models, Statistics, Data Distributions, Real-World Analysis, Times-Series, Reinforcement Learning, TensorFlow, Keras, Big Data, Tableau, Data Workflows, Data Architecture, Relational Databases, Data Mining, Databricks

**Coding:** Python, SQL, Relational Databases (RDBMS), R, Q language

**Business:** Project Management, Asset Management, Management Experience, Business Communication, Technical Writing, Presentation Skills.

## **Education**

### **Professional Certificate Data Science**

General Assembly 2020

### **Master's Certificate GIS**

University of Denver 2008

### **Bachelor of Arts Anthropology & Geography**

University of Colorado  
At Colorado Springs 2004