

Robert L. Zacchigna

[About - Robert-Zacchigna.github.io](https://github.com/robert-zacchigna) ❖ [Contact - Robert-Zacchigna.github.io](https://github.com/robert-zacchigna) ❖ [linkedin.com/in/robert-zacchigna](https://www.linkedin.com/in/robert-zacchigna)

TECHNICAL SKILLS

- **Data Science:** Modeling, Machine Learning, Forecasting, Text Mining, NLP, Ensembles, Optimization, Regression, Statistics, Scraping, Tensorflow, PyTorch, Keras, Deep Learning
- **Data Engineering:** Data Pipelines, ETL, ELT, Airflow, Glue, Data Factory, Orchestration, Data Warehouse, Data Lake, Data Structures
- **DevOps:** Docker, Kubernetes (K8s), Github, Git, Jira, Agile, Jenkins, CI/CD, Unit Testing, MLOps, Security, Monitoring, Artifactory
- **Cloud:** AWS, AWS Solution Architecture, EC2, ECS, EMR, Glue, RDS, Redshift, Redis, S3, EFS, SQS, SNS, IAM, Lambda, Databricks, Jupyter, High Performance Distributed Workflows
- **Databases:** NoSQL, MySQL, PostgreSQL, SQLite, Aurora, DynamoDB, ElastiCache, Redshift, Snowflake
- **Programming:** APIs, Python, Spark, Scala, SQL, HTML, CSS, Linux, bash, yaml, pyspark, pandas
- **Visualization:** Power BI, Tableau, Plotly, ggplot2, matplotlib, seaborn, stakeholder presentations

WORK EXPERIENCE

Capital One

May. 2022 – Present

Software Engineer

Chicago, IL

- Facilitated operations for various internal teams by optimizing and managing an in-house, cloud-based ETL platform dedicated to efficient data and report processing.
- Migrated existing data pipelines to serverless architectures such as EC2 to Fargate and EMR to Glue which reduced time and compute cost.
- Migrated/Rebuilt inefficient data processes to use modern (even driven – AWS SNS and EventBridge) distributed workflows in the cloud (Airflow + AWS Glue + PySpark).
- Acted as the designated subject matter expert within my team, providing comprehensive knowledge and guidance on cloud and workflow architectures utilized by the internal teams we assisted.

Discover Financial Services

June. 2019 – May. 2022

Data Engineer

Riverwoods, IL

- Spearheaded the optimization and automation of data processes previously managed through non-scalable methods on legacy on-premise systems.
- Conducted in-depth analysis of intricate manual legacy processes which were then modernized using Python + Airflow and an event-driven architecture to enhance data processing efficiency.
- Facilitated the migration of SQL processes from Teradata to Snowflake, necessitating the development of a custom SQL conversion tool which ensured a quick and efficient translation of SQL code and processes.

Administrative Technologies at Illinois State University

Apr. 2017 – May. 2019

System Administrator

Normal, IL

- Maintained various applications in the IT department used internally and by both faculty and students.

EDUCATION

M.S., Data Science, Bellevue University

Nov, 2021

- Completed degree while working for *Discover Financial Services* Full-Time
- Created a website to showcase my various data science projects: <https://robert-zacchigna.github.io/>

B.S., IT - Systems Analyst/Development, Illinois State University

May, 2019

Honors: *Cum laude*, National Society of Collegiate Scholars

CERTIFICATIONS AND PROJECTS

- [AWS Certified Solutions Architect – Associate](#) (Aug, 2022)
- [AWS Certified Machine Learning – Specialty](#) (May, 2024)
- Major contributor to python Etrade equity trading API wrapper ([pytrade](#))
- Personal self-hosted automated home-lab for testing and dev