Sidney La Fontaine

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WORK EXPERIENCE

CommonSpirit Health, Chicago, IL

Senior Technical Data Architect May 2025 - Present

- Key member of the team leading the technical supply chain implementation of Workday ERP. Designing a new normalized schema to store all CommonSpirit Health supply chain data. Integrating data from 10 separate ERPs into the new schema.
- Working closely with subject matter experts to lead requirement gathering, resolve standards and exceptions, and present my team's technical solutions
- Implement development standards, lead team code reviews, and review pull requests (PRs) in Azure DevOps
- Developed and maintained SQL cloud data warehouse utilizing big data tools including DBT, Prefect, GCP, AWS, and Azure DevOps
- Designed, coded, optimized, and maintained Python ETL/data pipelines that connect disparate healthcare data sources

Data Scientist June 2023 - May 2025

- Developed and maintained SQL cloud data warehouse utilizing big data tools including DBT, Prefect, GCP, AWS, and Azure DevOps
- Migrated data warehouse from AWS to GCP, updating legacy code for data models, tables, reports, ETL/data pipelines, etc.
- Designed, coded, optimized, and maintained Python ETL/data pipelines that connect disparate healthcare data sources
- Pioneered projects that automatically emailed recipients based on complex analytics, utilizing a relay server. Estimated time saved: up to 100 hours per week for multiple projects
- Analyzed complex supply chain datasets to identify patterns, trends, and anomalies to draw meaningful conclusions
- Participated in CI/CD development utilizing Azure DevOps and AGILE project management

Network and Distributed Systems Security Lab; funded by Toyota InfoTech, Boston, MA January 2022 - July 2022

Autonomous Driving and Algorithms Research Co-op

- First-authored **Alternative Route-Based Attacks in Metropolitan Traffic Systems** paper: selected to publish and present at the 52nd IEEE/IFIP International Conference on Dependable Systems and Networks (DSN)
- Researched Connected and Autonomous Vehicle (CAV) security issues to help make the future of autonomous driving safer
- Designed and implemented four heuristic graph algorithms in Python targeting the shortest paths of vehicles to simulate traffic disruption attacks against CAVs in real city transportation graphs

Genentech, San Francisco, CA January 2021 - July 2021

Natural Language Processing (NLP) Analyst Co-op

- Utilized NLP techniques to extract structured data from text to connect biological research topics and authors to drive future biology research
- Applied BERT Machine Learning Language Model and rule-based NLP algorithms in Python to over 36 million PubMed abstracts to execute Name Entity Recognition and Relation Extraction tasks
- Designed and built graph database on AWS EC2 instance using Neo4j, containing tens of millions of biological entities and relationships between them extracted from PubMed abstracts and public data

Northeastern University, Boston, MA and London, UK January 2019 - December 2022

Part-Time Teacher's Assistant on Boston Campus and Full-Time Teacher's Assistant on London Campus

- Lectured up to four weekly lab sections of 30 to 101 students on principles of programming, such as representing data in code and recursion
- Collaborated with professors to design course materials
- Conducted office hours and tutored students one-on-one

X-Cel Education, Boston, MA September 2018 - January 2023

Volunteer GED Math Tutor

- Volunteered as a Math Tutor, teaching adults pursuing a high school equivalency degree

EDUCATION

Northeastern University, Boston, MA May 2023

Bachelor of Science in Data Science; Minors in Mathematics and Philosophy

GPA: 3.87

SKILLS

Technical Skills: Python, SQL, Azure, Cloud Data Warehousing tools (such as Redshift and GCP, equivalent to Snowflake), ETL/Data Pipeline tools (such as Prefect and Airflow, equivalent to Databricks), Java, DBT, TensorFlow, Pytorch, JavaScript, R, C++, AWS, Neo4j, Scala, MongoDB, Redis, HTML, CSS, Docker, Tableau

HONORS/AWARDS

- Northeastern University Honors Program
- Dean's Scholarship
- Dean's List all 8 semesters
- First-authored **Alternative Route-Based Attacks in Metropolitan Traffic Systems** paper: selected to publish and present at the 52nd IEEE/IFIP International Conference on Dependable Systems and Networks (DSN)