

John R. Molina

johndev.io | github.com/rich-txt-editor | johnrichardmolina@gmail.com | linkedin.com/in/jrmolin90

Technical Skills

Backend: Python, Flask, Django, REST APIs, Microservices, Database Design, API Gateway

Frontend: React, JavaScript, Tailwind CSS, Responsive Design, Material UI

Data Engineering: ETL Pipeline Development, Data Warehousing, Modeling, and Integration, Distributed Systems

Database Systems: Oracle, MySQL, PostgreSQL, SQLite3, PL/SQL, Database Optimization

Programming & Tools: Python, C/C++, PHP, Java, SQL, Markdown, Shell Scripting, Kafka

Big Data & Cloud: AWS EC2, Docker, Data Lakes, Distributed Systems, Cloud Computing

Data Quality & Security: Data Validation & Governance, SSL/TLS, Access Control, Data Integrity

Projects

johndev.io

Jan. 2024 - Present

A personal blog and portfolio site

- Developed a full-stack web application using Django and React, hosted on an Ubuntu Droplet.
- Designed a scalable SQLite3 database alongside a REST API to support Create, Read, Update, and Delete (CRUD) operations for blog content.
- Developed a responsive front end using React and Tailwind CSS, ensuring an optimal user experience across devices.
- Implemented various security measures for production environments, including CAPTCHA, rate limiting, and SSL/TLS configurations to safeguard data integrity.
- Executed deployment through GitHub Continuous Integration/Continuous Deployment (CI/CD), utilizing Docker for containerization and Nginx for performance optimization

Experience

Development Assistant

Dec. 2017 – Aug. 2022

Columbia University, Office of Alumni & Development Data Management Group

New York, NY

- Architected and maintained complex ETL pipelines processing 1M+ constituent records between Oracle database, Athena fundraising platform, and Salesforce API, achieving 99.9% data delivery reliability
- Designed and implemented automated and manual data quality frameworks, increasing verified constituent records from 75% to 98% through systematic validation and cleansing processes
- Engineered scalable data integration solutions that supported \$5B annual fundraising targets and drove a 156% increase in alumni participation through optimized data flows
- Developed robust data verification workflows using LexisNexis and Initium, implementing automated matching algorithms that reduced manual review time by 70%
- Monitored and tested a real-time data synchronization system between Oracle, Athena, and Salesforce, reducing data latency from 24 hours to under 5 minutes
- Led technical implementation of data governance policies, reducing data inconsistencies by 85% and ensuring GDPR compliance

Data Coordinator

Aug. 2017 – Dec. 2017

Columbia University, Office of Alumni & Development Data Management Group

New York, NY

- Developed automated ETL processes for Oracle database and Athena, processing 50,000+ daily records with 99.8% accuracy
- Implemented data quality monitoring system with automated alerts, reducing error detection time by 60%
- Created data validation framework using Python and SQL to enforce data integrity policies across multiple databases.
- Optimized database queries and indexing strategies, improving query performance by 40% across major workflows.

Donor & Database Relations Associate

Feb. 2016 – Aug. 2017

Parkinson's Foundation

New York, NY

- Engineered data pipeline in Raiser's Edge database, implementing automated quality control measures that reduced data redundancy by 35%
- Developed an automated batch processing system for donation data, increasing processing efficiency by 75% and reducing manual errors.
- Created data integration workflows between multiple systems, ensuring seamless data flow for fundraising operations.

Education

Montclair State University

Montclair, NJ

Bachelor of Science in Computer Science

Hudson County Community College

Jersey City, NJ

Associate of Science in Computer Science