Genevieve Del Prete

Aspiring Software Engineer

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Experience

Lyft | Regulatory Reporting Intern
San Francisco, CA | June – August 2019
- Pioneered automation effort and developed a script for Apache Airflow that eliminates manual data report process. On average, saves team 7 hours per automated report per quarter.
- Designed a Python/Pandas script that merges and dedupes daily data files, each with 100+ rows of data, to improve an internal reporting process for rental providers in high-touch markets.
- Wrote SQL queries to pull critical data for 10+ ad hoc requests from regulators in high-touch markets.
- Created an entity relationship diagram (ERD) to map column relationships between high use data tables. ERD became part of the team's onboarding resources.

Projects

"MOOCbase" Relational Database (Java)
UC Berkeley | September – December 2020
- Implemented a relational database in Java.
- Optimized query execution by implementing B+ tree data structures and the System R algorithm.
- Incorporated 2 Phase locking constraints to allow for concurrent data transactions.
- Implemented the ARIES Recovery algorithm to increase database resiliency after a crash.
- Achieved 98.8% overall test accuracy.

End-to-End Encrypted File Sharing System (Golang)
UC Berkeley | March 2020
- Designed a stateless file sharing client in Golang with efficient file storage, loading, and sharing.
- Utilized encryption, digital signatures, HMACS, and hash functions to provide confidentiality, authenticity, and integrity for client's users.
- Tested using a compromised data storage server and protected against 80% of attacks.

Data Report Automation (Python, Pandas, Hive, Apache Airflow)
Lyft | July – August 2019
- Developed a script for Apache Airflow that builds data reports using Python, Pandas, and Hive, and sends the reports to a secure digital storage location for regulators.
- Collaborated cross-functionally with engineers from Lyft and an engineer from an external secure digital storage company for a REST API request.
- Authored an automation template and documentation to further team goal of automating 5 data reports before end of year.

Education

University of California, Berkeley
Berkeley, CA | August 2017 – December 2020
- Bachelor of Arts (B.A.) in Computer Science, GPA: 3.72
- Coursework: Data Structures, Efficient Algorithms and Intractable Problems, Discrete Math and Probability Theory, Database Systems, Machine Structures, Computer Security, Computer Graphics, Artificial Intelligence, and Principles of Data Science

Skills

- **Languages:** Python, Java, HTML, CSS, JavaScript, C, C++, SQL, Golang, Pandas
- **Tools/Technologies:** Git, SciPy (NumPy, Matplotlib), Apache Airflow, Three.js, WebGL, OpenGL, Scikit-learn, MongoDB, MapReduce, Adobe XD