

KELSANG TSERING

347-497-0283 | kelsangrtsering@gmail.com | U.S. Citizen

[LinkedIn](#) | [Portfolio](#) | [GitHub](#)

SKILLS

Languages: Python, JavaScript, Scala, Ruby, Java, SQL, HTML, CSS.

Technologies: Scio, Luigi, Flyte, Apache (Flink, Beam, Avro, Parquet), Google Cloud Platform (Dataflow, BigQuery, BigTable, Cloud Storage), Amazon Web Services (S3, EC2), PostgreSQL, MongoDB, React, Node.js, Express.js, Ruby on Rails, Mongoose.

Tools: Git, Docker, Kubernetes, sbt, npm, Jira, Ratatool, Jasmine, Jest, VS Code, IntelliJ Idea, Grafana, Mural.

Concepts: RESTful API, CI/CD, CRUD Functionality, MVC, ORM, RDBMS, NoSQL, ETL, ELT, Test-Driven Development, Unit Testing, End-to-End Testing, Functional Programming, Object-Oriented Programming, Scrum, Agile.

EXPERIENCE

Data Engineer

Aug. 2023 – Feb. 2024

Spotify

New York, NY

- Created and maintained data pipelines, written in **Scala** and **Python**, that perform **ETL** functions and process terabytes of data every day
- Performed advanced **SQL** queries on datasets to investigate potential discrepancies within geographic data
- Refactored multiple downstream pipelines to use a newer and improved upstream dataset, eliminating complexity and enforcing a single source of truth in the Spotify for Artists (S4A) platform
- Implemented **unit testing** and **end-to-end testing** in data pipelines supporting the S4A platform, ensuring data passed checks and validations prior to being viewed for analysis by other teams
- Investigated and removed deprecated pipelines in the S4A platform, contributing to the team goal of reducing tech debt
- Authored a plan to refactor pipelines in the Fans First campaign system to use standardized internal tooling and replace **API** calls with a direct-to-database query, ensuring standardization of workflow styles, enabling improvements in pipeline runtime efficiency, and leading to potential cost savings
- Charted the Fans First campaign system's data infrastructure onto **Mural**, allowing future collaborators to easily visualize data transfers and transformations within the system.

PROJECTS

Music for Memory - Spotify | *Python, Scala, Luigi, Scio, Dataflow, BigQuery*

- Contributed to building the data infrastructure of an in-house, Full Stack application made with the purpose of helping patients affected by Dementia reconnect with their past through the medium of music
- Created a **Scio** and **Luigi**-based data pipeline that runs on **Dataflow**, consumes large datasets, performs nostalgia filtering logic, and outputs a **BigQuery** dataset containing popular songs based on demographic groupings
- Employed the use of **Ratatool**, a Spotify-built data generation tool, to create mock data for **unit testing** purposes, aiding in the increase of testing coverage in the pipeline
- Utilized various Spotify datasets to compute filtering logic to remove white noise tracks from the output dataset
- Optimized pipeline runtime efficiency by reordering dataset joins, prioritizing groupings between smaller datasets to reduce pipeline runtime
- Communicated actively with the backend team to enforce a standardized schema and ensure they were able to seamlessly query the output **BigQuery** dataset to generate playlists for the user.

Rainier | *JavaScript, Ruby, React, Ruby on Rails, PostgreSQL, Amazon S3*

[GitHub](#)

- Built a Full Stack clone of Amazon utilizing **React** and **Ruby on Rails**
- Created a shopping cart system with **CRUD functionality**, enabling users to add/remove/update items in their cart
- Developed fully encrypted user authentication using **BCrypt**, creating a secure method for users to sign up, in, and out
- Leveraged **Amazon S3** to store seed files for products and retrieved them using Rails associations.

EDUCATION

App Academy

New York, NY

Full Stack Web Development Program

Jan. 2023 – Apr. 2023

- Immersive 16-week Full Stack web development program with a < 3 % acceptance rate.

Baruch College: Zicklin School of Business

New York, NY

Bachelor of Business Administration in Finance, Minor in History

- GPA: 3.756/4.0 *magna cum laude*
- Honors: Enrolled in Dean's Scholars Program, Dean's List (Awarded 7 times), Awarded Full-Tuition Scholarship.