

# Alexander Ilyin

650-504-8065 • [Email](#) • [LinkedIn](#) • [Personal Website](#)

## EXPERIENCE

---

**Data Analyst**, Connor Group, Santa Clara, CA

July 2020 – Present

- Designed, developed, and deployed automated data pipelines for clients ranging from high growth startups to established firms as part of efforts to assist clients with creating efficient accounting practices and IPO readiness. Data pipelines integrated client's CRM and ERP platforms such as NetSuite and Salesforce with transactional data from payment service providers.
- Used Python libraries such as Requests and Pandas to connect to API endpoints, extract data, and to apply data transformations.
- Cron task scheduling was used to kick off jobs and create data files, the files are picked up by the iPaaS API integration tool Workato, which creates records in the client's internal systems. Amazon S3 and Athena were used to maintain client data stores.
- New data pipelines decreased compilation times of legacy integrations by up to 30%.
- Performed thorough analysis and validation of data to make sure proposed solutions would adhere to financial rules and regulations before using tools such as Lucidcharts to document Entity Relationship Diagrams, use cases, and ETL workflows.
- Assisted the clients with monitoring and debugging of the new pipelines following deployment.

## PROJECTS

---

### MS Analytics Capstone Project

- Used the Python library Scipy to apply Unsupervised Clustering techniques and products based on their attributes, and evaluated social media advertising campaign success within clusters using a self-defined social media brand score.
- Used Python to apply Machine Learning models such as Logistic Regression, Random Forest, and RNNs using libraries Sklearn and Keras to optimize future social media advertising campaigns and predict the success of products.
- Implemented NLP techniques such as Topic Modeling and Sentiment Analysis with visualization techniques such as word frequency and word clouds to allow further exploration of marketing campaign score fluctuations.

### Python/C++ Wrapper for Spotify API - <https://github.com/alexilyin1/CPPotify>

- Integrated Python and C++ to create a more efficient version of existing Python Spotify API wrappers
- Authentication, API requests and other heavy lifting is done through C++, with Python handling request responses and serving as the interface through which users interact with the API
- In direct comparison to other popular Spotify API libraries, my library reduced compilation times by up to 25%

### Twitter Data Collection Web App - <https://github.com/alexilyin1/tweetbot>

- Built a Django-based web app for the popular Python Twitter API library "Tweepy" to allow users to seamlessly scrape live data from Twitter for research purposes
- Tweets are asynchronously streamed to a backend PostgreSQL database using Celery and Redis for task scheduling, users can then download their data and view basic analytics and visualizations created from the newly acquired dataset

## EDUCATION

---

**UC San Diego** | Masters of Science in Analytics

June 2020

- Relevant Courses: Machine Learning Systems, Statistics for Analytics, Customer Analytics
- Recipient of Rady/UC Academic Fellowship, Admissions Ambassador

**UC Santa Cruz** | Bachelors of Science in Management Information Systems – Honor's

June 2019

- Relevant Courses: Calculus I-III, Linear Algebra, Probability Theory, Data Structures, Database Management Systems
- Dean's List, Member of Information Systems Management Association and Tennis Club

## SKILLS

---

**Programming Languages:** Python (Pandas, Matplotlib, Scikitlearn, Keras), R (ggplot, Plotly, Tidyverse), C++, PostgreSQL

**Data Visualization:** Tableau, R-Shiny, Python-Dash

**Other:** Python Web Frameworks – Flask/Django, PySpark, AWS Sagemaker, ETL, A/B Testing, Snowflake