

# SIERRA COSTANZA

## Software Engineer

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

## WORK EXPERIENCE

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### EducationSuperHighway (San Francisco, CA)

Software Engineer

Sep 2019 - Present

- Develop an externally facing web application that provides internet price transparency to decision makers in school districts throughout the US that helps them upgrade their internet infrastructure
- Build and maintain a data pipeline using Python, pytest and AWS Lambda to execute series of SQL scripts that make data available for both the front-end product and for analysts to query in Amazon Athena
- Create automated unit, integration and UI tests for both the front-end app and data pipeline

Data Engineer

Nov 2018 - Sep 2019

- Converted and then maintained a layered PostgreSQL data warehouse from a previously flat architecture to improve and simplify analytical processes
- Developed machine learning models and outlier detection algorithms to help automate manual data cleaning. Both helped to reduce the time spent manually cleaning by nearly 50% over 2 years
- Built data pipelines in Python to ingest and integrate external datasets to help enrich analyses
- Designed and built a metrics generation and tracking tool that streamlined the team's collection of 300+ metrics each year that were used in our annual report

Data Analyst

Apr 2017 - Nov 2018

- Quantified internet connectivity gaps for 13,000 school districts nationwide leveraging data from the Federal Communications Commission (FCC)'s E-rate program and provided policy recommendations
- Prepared Tableau dashboards and reports for our consulting teams to provide them with accurate data to track progress towards specific school districts' connectivity needs

### PayPal (San Jose, CA)

Senior Analyst, Marketing Analytics

Jun 2014 - Apr 2017

- Performed exploratory analyses on consumer behaviors to answer business questions and uncover insights to help drive marketing decisions
- Built Tableau dashboards to report on marketing A/B test results and visualize consumer behavior trends

## TECHNICAL SKILLS

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SQL, Python, pytest, Node.js, React/Redux, AWS, Linux/Shell Scripting, Git, CircleCI, Docker, R, Tableau, Google Suite, Excel, Powerpoint

## EDUCATION

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### Johns Hopkins University Whiting School of Engineering (Baltimore, MD)

B.S. and M.S., Applied Mathematics and Statistics

September 2010 - May 2014

### General Assembly (San Francisco, CA)

Data Science (Part Time Course)

January 19th - March 28th, 2017

Machine Learning in Python using numpy, pandas, scikit-learn, Jupyter notebooks

## AFFILIATIONS

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- Tutor for elementary school students with various organizations.
- Johns Hopkins Entertainer's Club (2010-2014): Oversaw a budget of \$1,500 per year for equipment and events as Financial Officer. Performed and choreographed juggling, unicycle and poi routines, both inside and on fire.
- Project SEED (Summers 2009 & 2010): conducted research as a high school student at a University of Vermont chemistry lab under Rory Waterman. Contributed to research on Phosphine dehydrocoupling featured in a 2015 publication.