

# SIERRA COSTANZA

## Software Engineer

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

## TECHNICAL SKILLS

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SQL, Python, Javascript, Node.js, React, Redux, AWS, Linux, Bash, Git, CircleCI, R, Tableau, Google Suite

## WORK EXPERIENCE

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### EducationSuperHighway (San Francisco, CA)

Software Engineer

Sep 2019 - Present

- Developed web applications using Node.js, PostgreSQL, AWS S3, Express, and React/Redux:
  - [Digital Bridge K-12](#): A secure site helping school districts map students who do not have access to the internet at home, and overlay local Internet service provider options and the location of hotspot solutions. Users can upload and view 50,000+ datapoints
  - [Connect K-12](#): Provides school district leaders with internet price transparency and insights they can use to upgrade their bandwidth and reduce costs
- Helped structure and maintain data pipeline for Connect K-12 using Python, pytest and AWS (Lambda, Cloudformation)
- Created automated unit, integration and UI tests for all apps

Data Engineer

Nov 2018 - Sep 2019

- Converted and 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
- 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

## 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/year for equipment and events. 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