# Fred Hope – Senior Software Engineer (805) 450-0792

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#### PROFESSIONAL EXPERIENCE

#### Eaze

# February 2018 - present

#### Senior Data Engineer

- owned realtime and periodic (Airflow) ETL into data warehouse from internal and external sources
- rebuilt and codified analytics infrastructure (Terraform, Ansible) for scalability
- built realtime event streaming pipeline (Kinesis, SQS) and implemented event logging in backend services (.NET)
- built event validator microservice to check event payloads and alert on malformed data
- developed private Python utilities library used across multiple services to reduce code redundancy
- created Slack app and backend service for interactive Slack alerts to improve efficiency of ops teams

## Opendoor

## March 2017 - February 2018

## Software Engineer

- owned data warehouse ETL (k8s, BigQuery, S3/GCS), including sync of internal databases and transformations on data (Airflow)
- built custom ETLs into data warehouse for additional data sources
- implemented robust method for partial deletion of unused S3 data, saving \$10k/mo
- set up monitoring, tracking, and alerting for data freshness
- designed and built tables which served as single source of truth for company-wide reporting and individual stakeholders

#### **Zenefits**

#### April 2015 – March 2017

## Senior Software Engineer, Data (January 2016 – March 2017)

- implemented in-house and third-party ETL tools to sync data into data warehouse
- developed systems to monitor data quality and integrity
- wrote scripts (SQL, Python) to transform data and produce useful datasets
- built low-latency pipeline to process streaming event data in Spark
- won company award: Making Zenefits a Great Place to Work

## Data Analyst (April 2015 – January 2016)

- owned high level reporting pipelines and analysis for management team
- provided hands-on SQL training for members of other orgs
- partnered with Product Operations to build model identifying clients at risk of churn

#### **SB Math Tutors**

#### January 2012 – April 2015

## Founder

• built company, acquired customers, and hired team of tutors to service the Santa Barbara market

#### RELEVANT SKILLS

- Python, R, SQL, Spark, Airflow, AWS (Redshift, S3, Kinesis, etc.), GCP, k8s, command line
- fluent in Spanish

#### RELEVANT SIDE PROJECTS

- text & graphics adventure games for Mac OS X (www.fredhope.com/games)
- Bash and R scripts to parse chat logs (www.fredhope.com/messagescorpus)
- interface + backend for dietary nutritional information (www.fredhope.com/macros.html)

#### EDUCATION

## University of California, Santa Barbara

B.S. in Mathematics

Regents Scholar