## 1 Intro to Google Cloud Platform

Build and host apps, websites, store data, etc. Has a shit ton of products.

- Compute
- Big Data
- Identity and Security
- IoT
- Machine LEarning
- Storage & Databases

## 2 App Engine

Deploy web apps and mobile backends to the Cloud.

Platform as a service product.

Managed application platform lets you focus on your code.

Autoscaling (0 to 1 scaling means dont pay when not getting requests), also lets you scale up (snapchat uses this), ie: runs more web servers as usage increases automatically, and load balances/traffic splitting (this lets you gradually shift to a new version).

google-app-engine-getting-started to get to demo

## 3 Machine Learning APIs

ML is learning from rules plus experience!

Classical programming is rules + data = answers

ML programming data + answers = rules

Linear regression is a form of basic ML.

ML is the study of algorithms that learn through experience.

Data-¿model-¿prediction

Google photos, translate, assistant all use ML models.

- Vision lots of cool shit!
- Video Intelligence
- Speech text to speech
- Natural Language: we want for the project.. analyzes text.. sentiment secion? Maybe use categories too
- Translate

Fun fact.. Google has dinosaur bones at HQ to remind people if you ain't going forwards you're going backwards!

### 4 Cloud Firestore

A NoSQL database

Collections (folders) of collections and data

Can easily make chat rooms

Highly scalable, multi-regional data replication (data is in several databases around world). Strong consistency.. new data propgates quickly. Client libs for everything, especially for mobile platforms.

Also easy to dump data to migrate to other shit.

# 5 API Challenge

Every member of winning team for best use of APi gets:

- google home mini
- patagonia backpack
- cloud pillow
- acrylic trophy
- $\bullet$  water bottle