

Data Engineering project:

Californian lightning strike data

Amy Kim



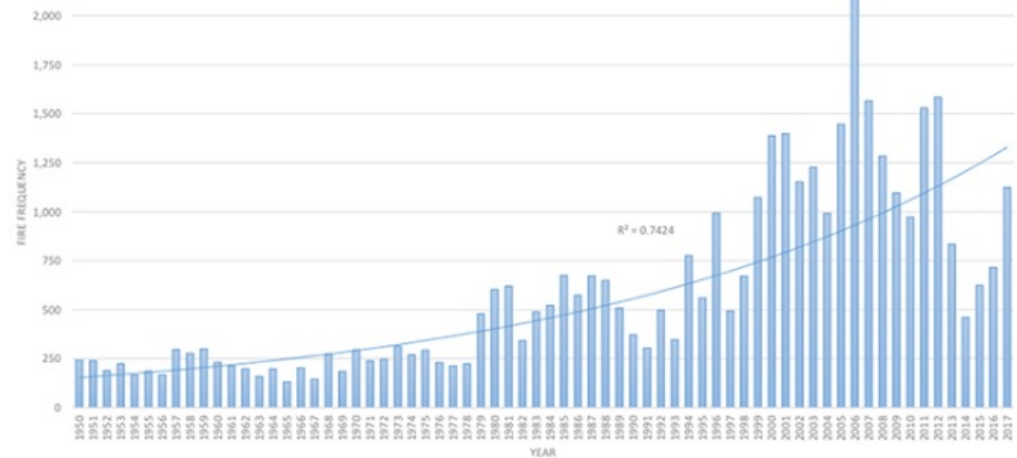
Goal

- Increasing frequency of fires in Western states
- Lightning is a source of ignition

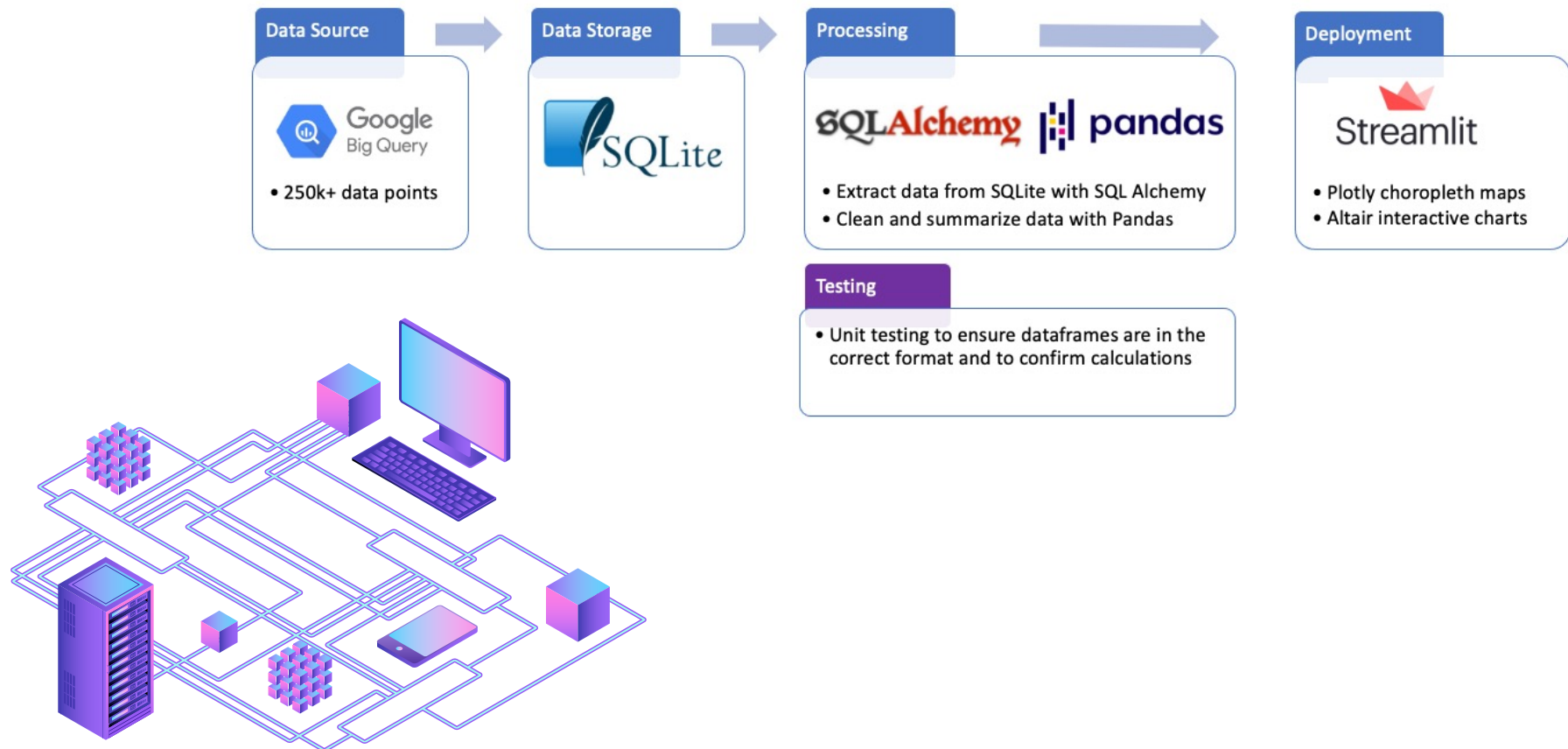
Create a data pipeline to visualize lightning patterns in California in an app



<https://climate.nasa.gov/ask-nasa-climate/2830/six-trends-to-know-about-fire-season-in-the-western-us/>



Pipeline

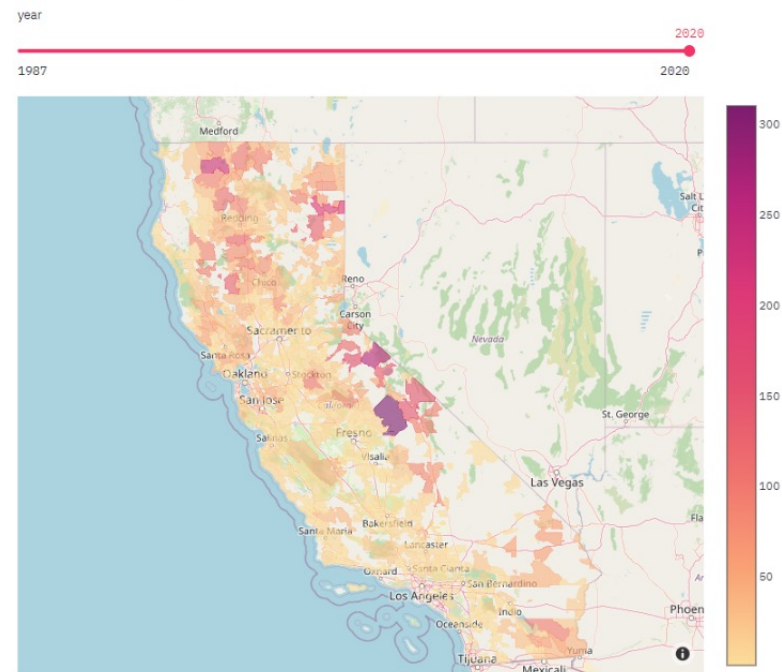


Streamlit Dashboard

https://share.streamlit.io/amyynekim/course_3_dataengineering/main

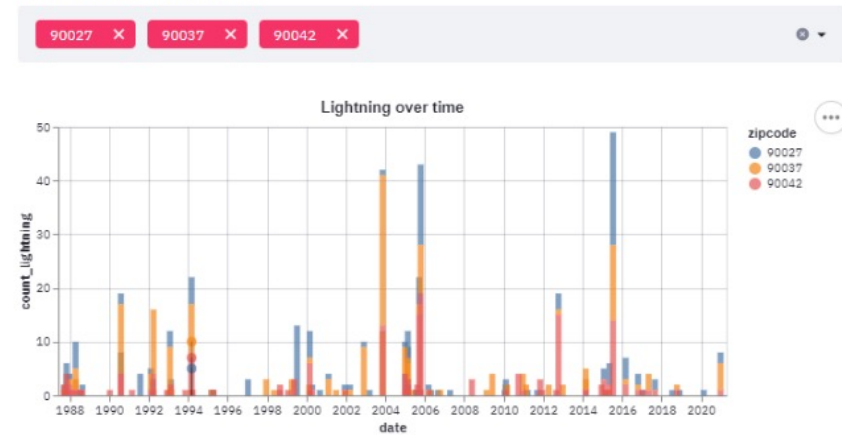
California Lightning Data

Lightning strikes by zipcode

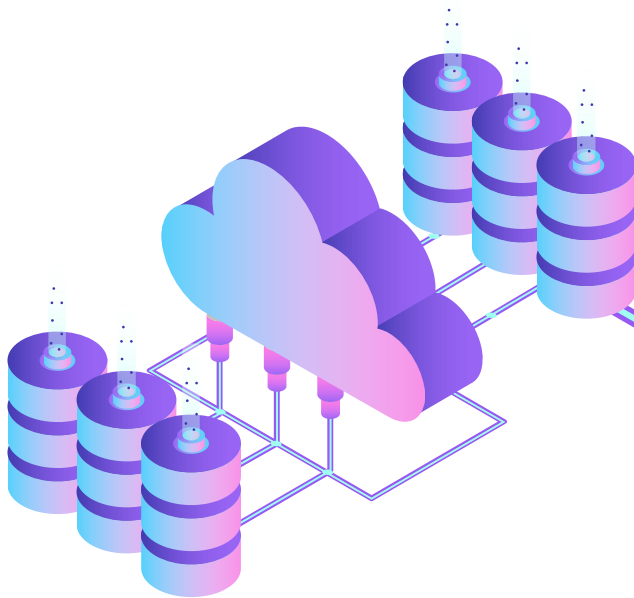


Lightning from 1987 to 2020

Choose zipcode or 'Total' to visualize



Future work



- ▣ **Overlay data on wildfire risk maps**
- ▣ **Expand to other regions with high wildfire risk**
- ▣ **Use cloud computing for expanded data sets**

