

Why are Longitudes and
Latitudes so smart ? 😎

Because they have a lot of
degrees



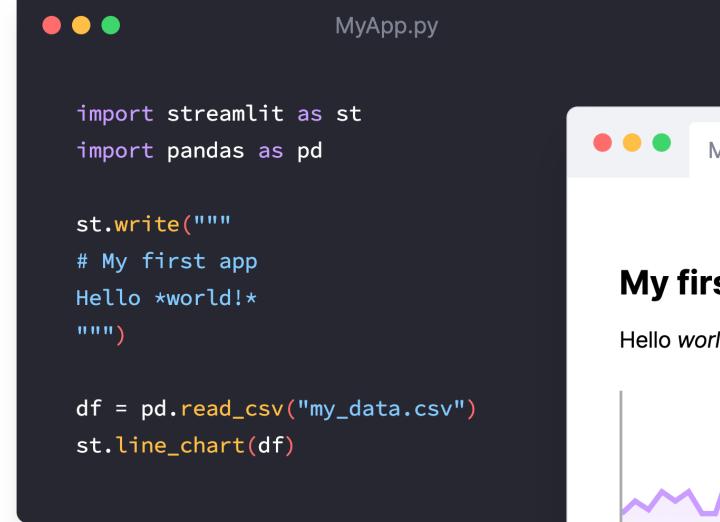
“You certainly don’t need a degree to get started with Streamlit.”

What is Streamlit 🤔

- Streamlit enables you to turn your Python scripts into Geospatial web-applications. No front-end experience is required.
- Streamlit is open source.
- You can deploy your apps for free using Streamlit Community Cloud: <https://streamlit.io/cloud>

Embrace scripting

Build an app in a few lines of code with our [magically simple API](#). Then see it automatically update as you iteratively save the source file.

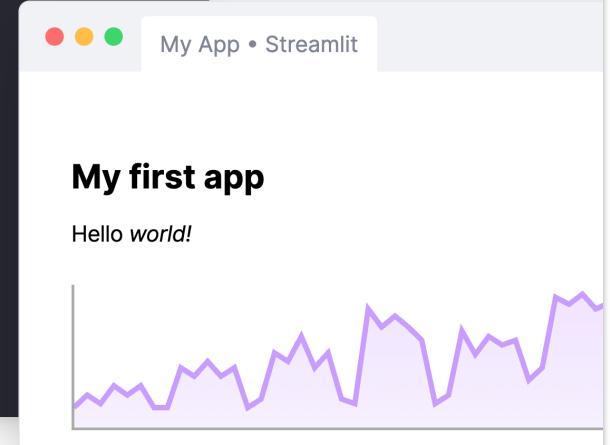


```
MyApp.py

import streamlit as st
import pandas as pd

st.write("""
# My first app
Hello *world!*
""")

df = pd.read_csv("my_data.csv")
st.line_chart(df)
```



Resources

- Streamlit Crash Course (25min video):
<https://www.youtube.com/watch?v=d7fnzDQ5qM8>
- Streamlit Playground (write and run Streamlit code online): <https://streamlit.io/playground>
- Gallery: <https://streamlit.io/gallery>
- Documentation: <https://docs.streamlit.io/>
- Community forum: <https://discuss.streamlit.io/>
- Youtube channel:
<https://www.youtube.com/@streamlitofficial>

Try out a limited version of Streamlit right in your browser.
Just edit the code below and the app on the right updates automatically.
For the real thing, [install our Python library](#).

EXAMPLES Blank Hello Charts Dataframes LLM chat Computer vision **Geospatial**

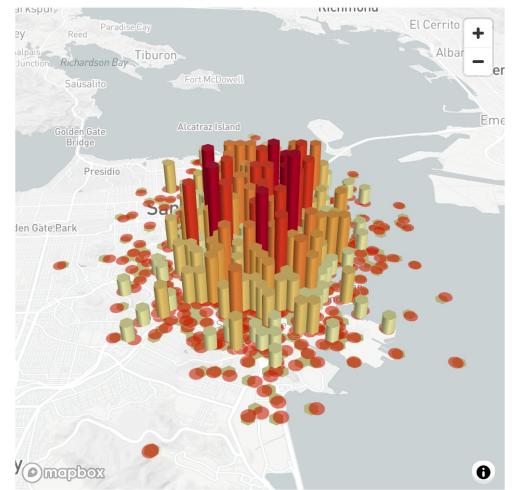
```
import streamlit as st
import pandas as pd
import numpy as np
import pydeck as pdk

st.write("Streamlit has lots of fans in the geo community. 🌎 It sup

chart_data = pd.DataFrame(
    np.random.randn(1000, 2) / [50, 50] + [37.76, -122.4],
    columns=['lat', 'lon'])

st.pydeck_chart(pdk.Deck(
    map_style=None,
    initial_view_state=pdk.ViewState(
        latitude=37.76,
        longitude=-122.4,
        zoom=11,
        pitch=50,
    ),
    layers=[
        pdk.Layer(
            'HexagonLayer',
            data=chart_data,
            get_position='[lon, lat]',
            radius=200,
            elevation_scale=4,
            elevation_range=[0, 1000],
            pickable=True,
            extruded=True,
        ),
        pdk.Layer(
            'ScatterplotLayer',
            data=chart_data,
            get_position='[lon, lat]',
```

Streamlit has lots of fans in the geo community. 🌎 It supports maps from PyDeck, Folium, Kepler.gl, and others.



Hello World

What is your name?

Gee Fernando

Hello Gee Fernando

When's your birthday

1989/08/18

Gee Fernando is 35 years old

Send balloons

Where were you born?

Colombo, Sri Lanka



```
import streamlit as st
from datetime import date
from geopy.geocoders import Nominatim
import pandas as pd

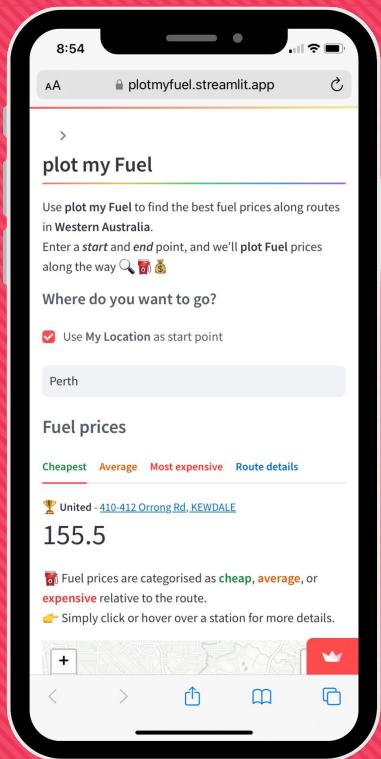
## Title ##
st.header(":rainbow[Hello World]", divider="rainbow")

## Text input ##
person_name = st.text_input("What is your name?", icon="👤")
if person_name:
    st.info(f"Hello {person_name}", icon="👋")

## Date input ##
person_birthday = st.date_input("When's your birthday", value=None, min_value=date(1900, 1, 1), max_value="today")
if person_birthday:
    today = date.today()
    person_age = today.year - person_birthday.year - ((today.month, today.day) < (person_birthday.month, person_birthday.day))
    st.info(f"{person_name} is **{person_age}** years** old", icon="🎂")

if st.button("🎈 Send balloons"):
    st.balloons()

## Geocoding and mapping ##
person_birthplace = st.text_input("Where were you born?", icon="📍")
if person_birthplace:
    geolocator = Nominatim(user_agent="my-geocoder")
    location = geolocator.geocode(person_birthplace)
    if location:
        location_dataframe = pd.DataFrame([{
            "latitude": location.latitude,
            "longitude": location.longitude
        }])
        st.map(location_dataframe)
```



configuration

Fuel type: Unleaded Petrol

Select day: Today

Search distance from route: 0.5km

Top up amount: 45L

About app

plot my Fuel lets you to find the best fuel prices along routes in Western Australia. This app not only shows you where to refuel but helps you find the cheapest prices along the way, making your trips more economical and efficient.

Background Info:

- Fuel Prices: sourced from [FuelWatch WA](#) to provide up-to-date information.
- Geocoding & Routing: powered by [Mapbox](#) for accurate location searches and reliable navigation.
- Analysis: utilises [GeoPandas](#) for spatial data insights.
- Visualisation: interactive maps created with [Folium](#) for a user-friendly experience.

Disclaimer

plot my Fuel is only a proof of concept (created for fun in my spare time). [Please use this at your own risk.](#)

Buy me a coffee

plot my Fuel

Use plot my Fuel to find the best fuel prices along routes in Western Australia. Enter a start and end point, and we'll plot Fuel prices along the way.

Where do you want to go?

Use My Location as start point

Lesmurdie

Perth

Route 1 Route 2

Fuel prices

Cheapest Average Most expensive Route details

United - 410-412 Orrong Rd, KEDDALE 175.5 ➔ \$78.97

Fuel prices are categorised as cheap, average, or expensive relative to the route.

Simply click on a station for more details.

Map showing fuel stations along a route from Perth to Lesmurdie. A callout box for BP Wattle Grove shows the following details:
BP Wattle Grove
Price: 189.9 ➔ \$85.45
Address: 48 Courtney Pl
Phone: 0999 940 018
Open 24 hours

plot my Fuel - <https://plotmyfuel.streamlit.app/>