

Rastreador ESP32

Sistema Embarcado

@shaftrobotica

Roteiro

1. Quem é Vitor
2. Como funciona o GPS
3. Funcionamento do rastreador
4. Esquemático do projeto
5. Código!

Quem é Vitor?



201



2016



2018



2018



2019



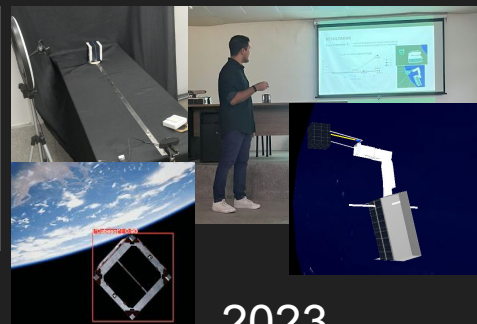
2019



2020



2022



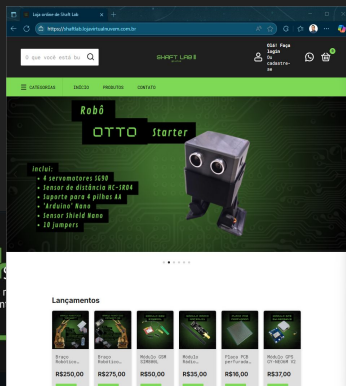
2023



2024

Projetos Recentes

@shaftlab

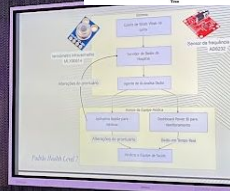
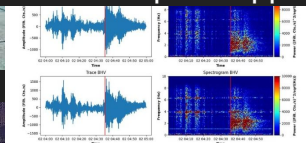


Eventos

LRC



NASA Space Apps



Inova Real



Rec n' Play
2024

Buyonic

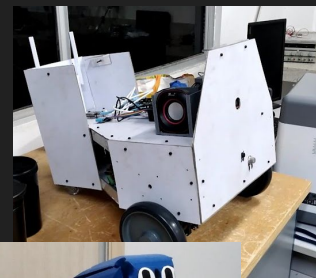
BUYONIC




Buypix




Robonejo



Como funciona o GPS

 GNSS: Todos os sistemas de navegação por satélite.

GPS: Sistema americano, um dos sistemas GNSS. 

GNSS:



GPS



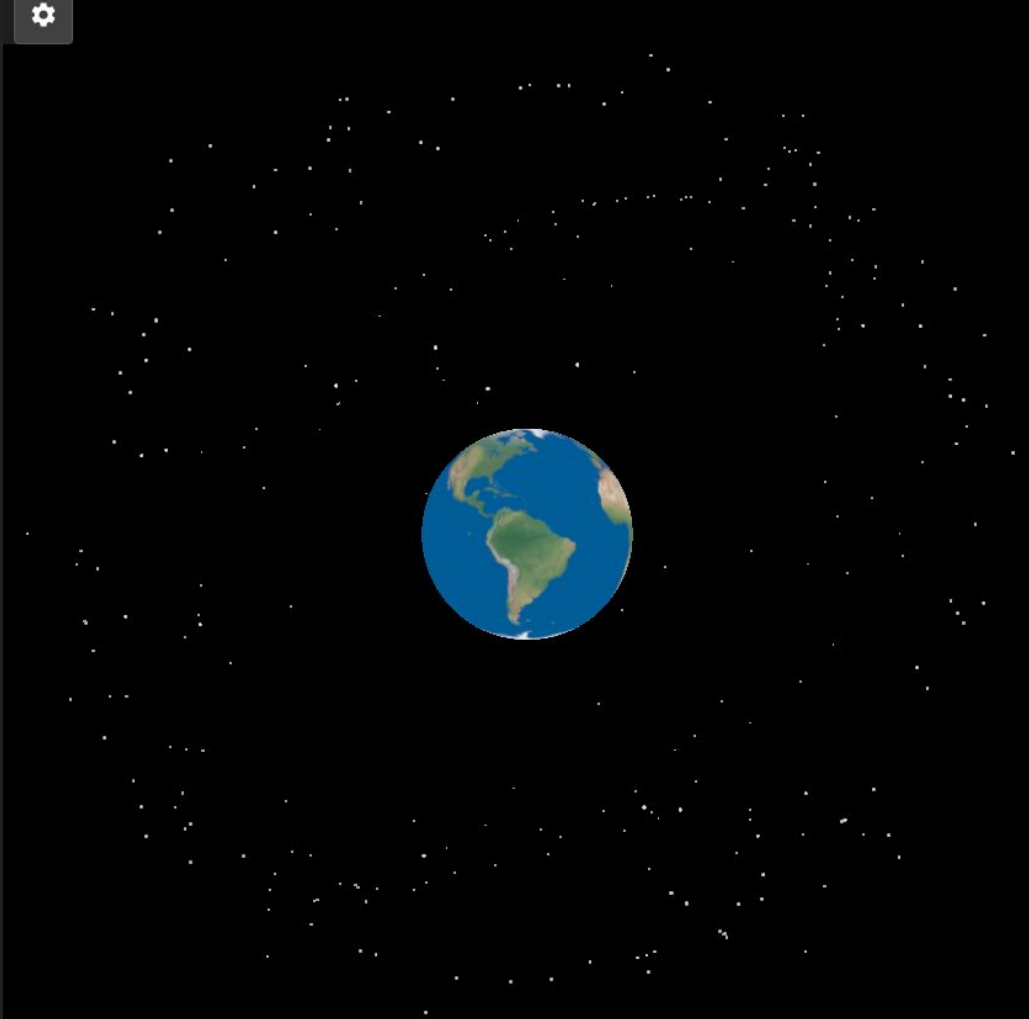
Galileo



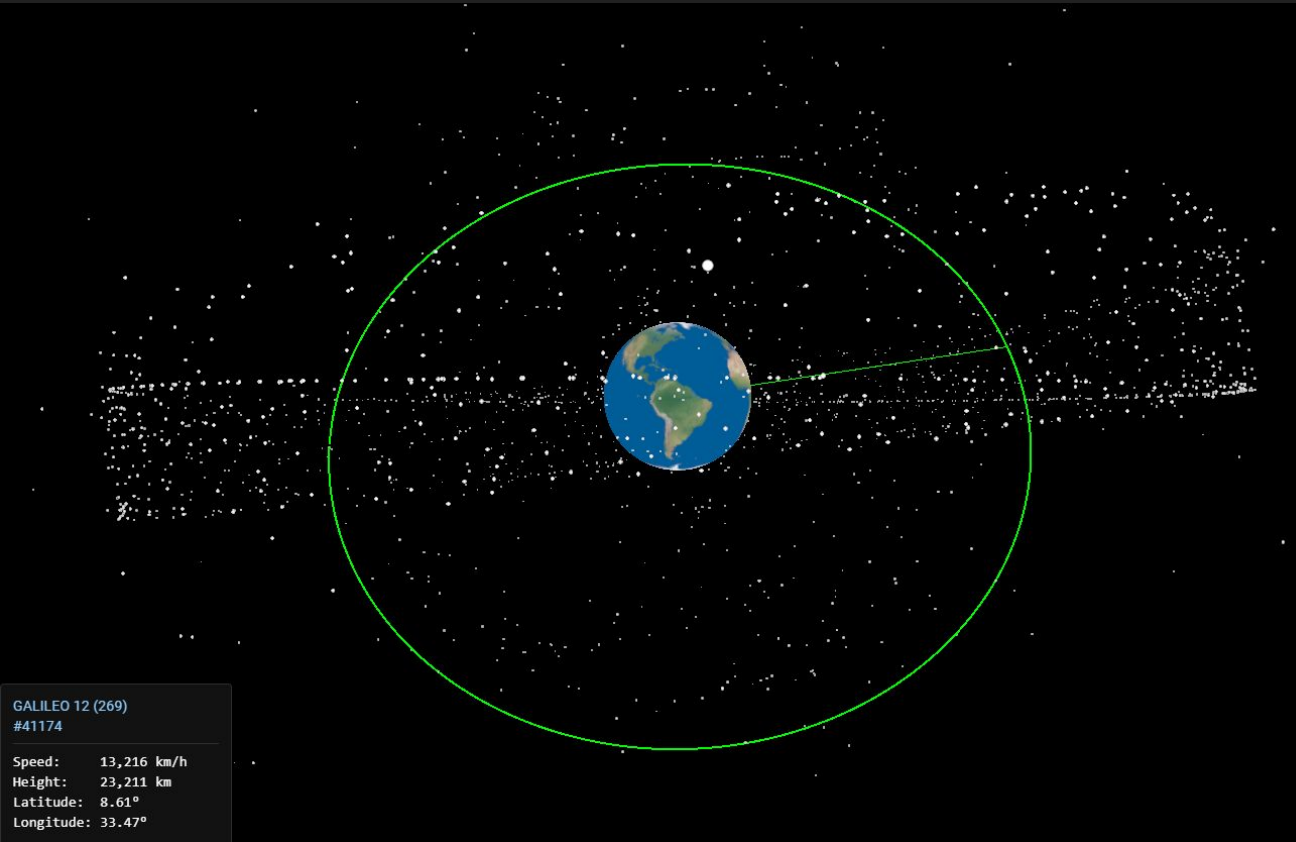
Glonass



BeiDou



Como funciona o GPS

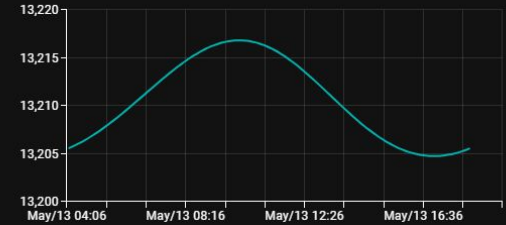


Choose the number of revolutions to display:

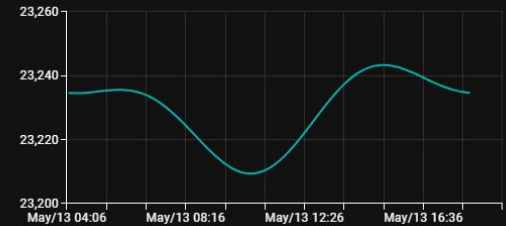
Revolutions

One revolution

Speed (km/h):



Height (km):

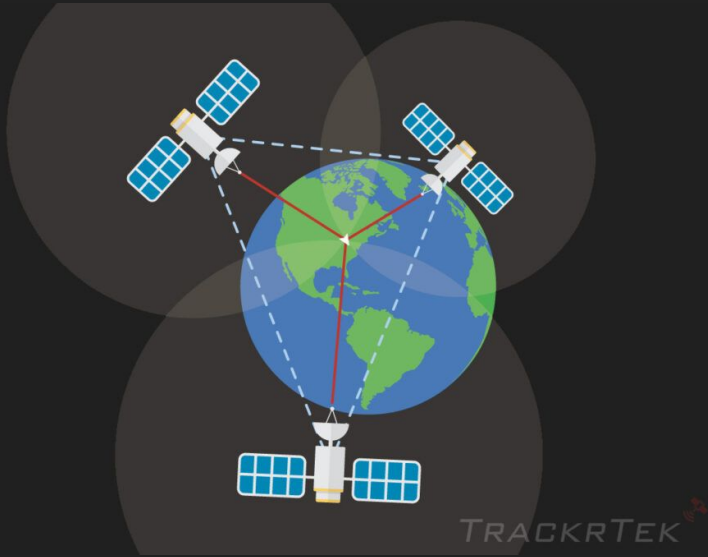


Latitude (°):

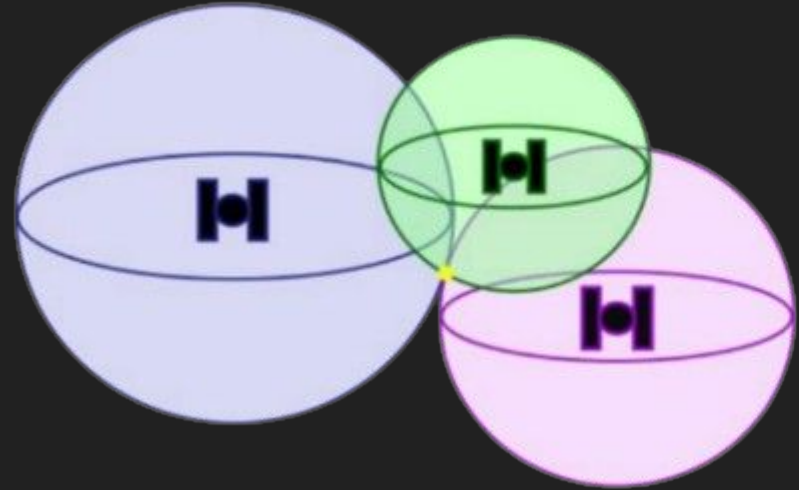


Como funciona o GPS

Trilateração

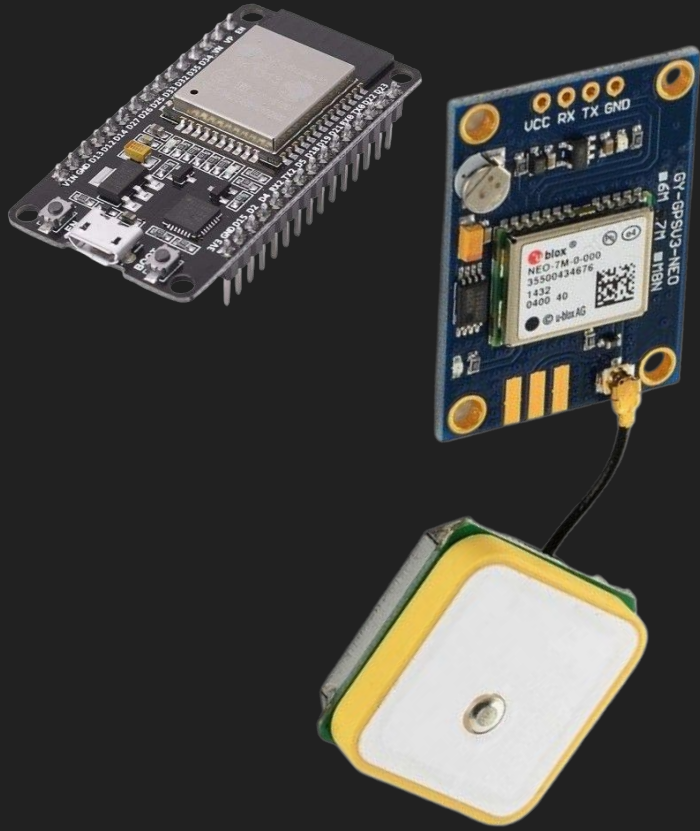


Satélites calculam distâncias



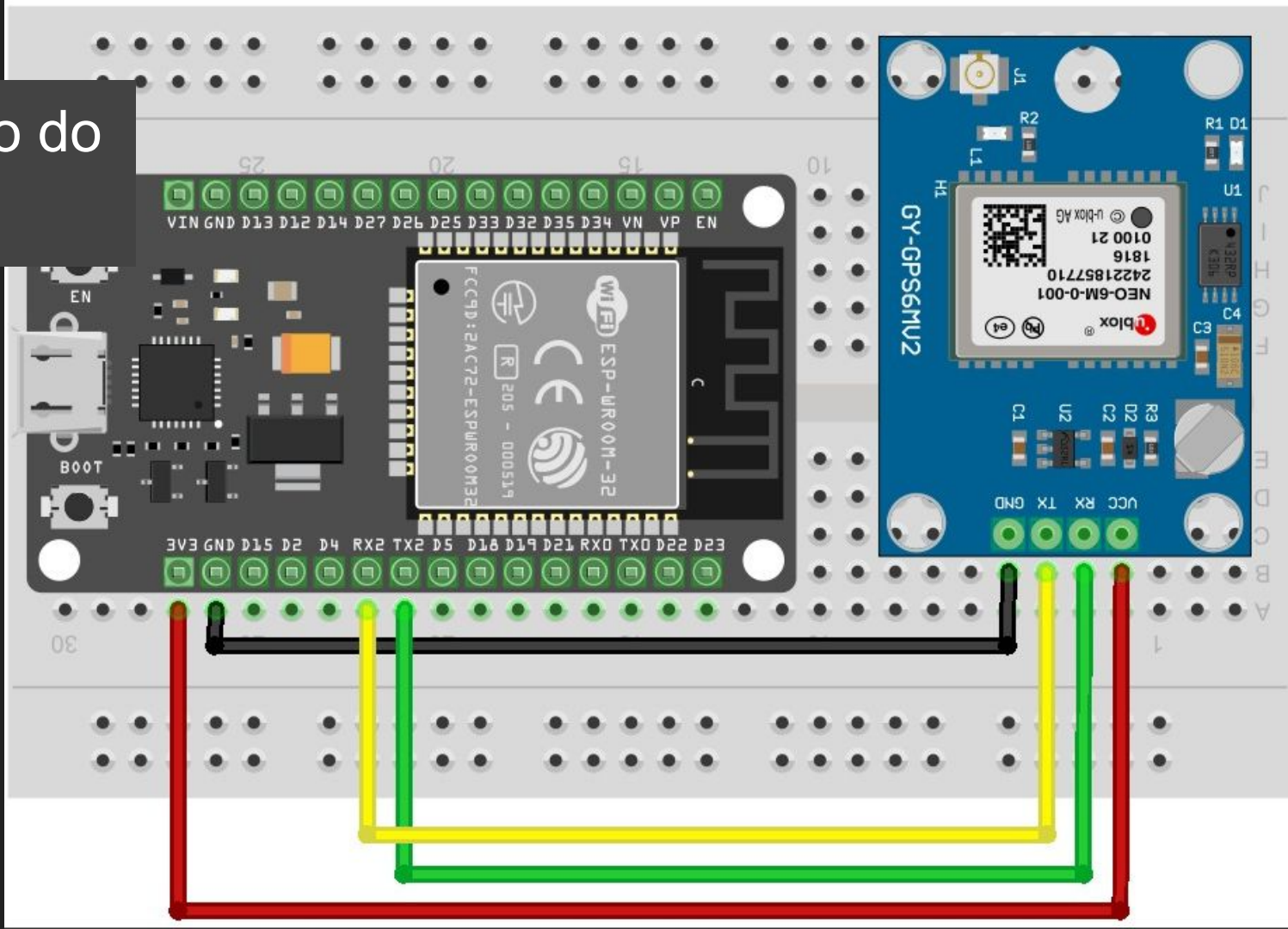
Onde as esferas se encostam
(ponto de tangência/intersecção)

Funcionamento ESP32 com GPS



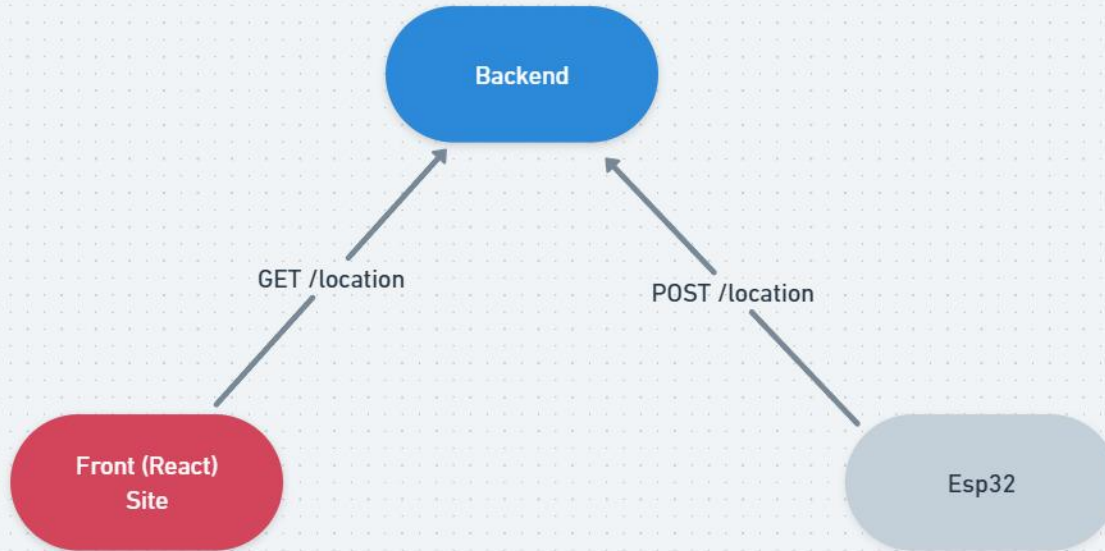
- antena externa
- EEPROM integrada
- Comunicação Serial UART/RS232
- Fonte de alimentação: 3V a 5V
- Taxa de transmissão padrão: 9600 bps
- Funciona com sentenças NMEA padrão
- funciona com Arduino, ESP32, ESP8266, Raspberry PI, etc.

Esquemático do projeto



Esc
pro

Rastreador GPS com ESP32



```
> live.codar( agora );
```