

Speed Breaker Detection and Warning System

Indian Institute of Information Technology, Vadodara
Anjul Tyagi, Yash Choubey, Aditya Prakash, Manu Sharma

Introduction

Bumpy helps to make your journey smoother and safer. Any speed breaker you face on the road to your destination is recorded by Bumpy. It warns you for same breaker whenever you travel on that road again.

WHY BUMPY?

A safe and smooth journey for you and your loved ones. To give you a way to see what is coming ahead. Avoiding the impact with a speed-breaker or at least minimizing it. This way we may save your hospital bill.

SCREENSHOT

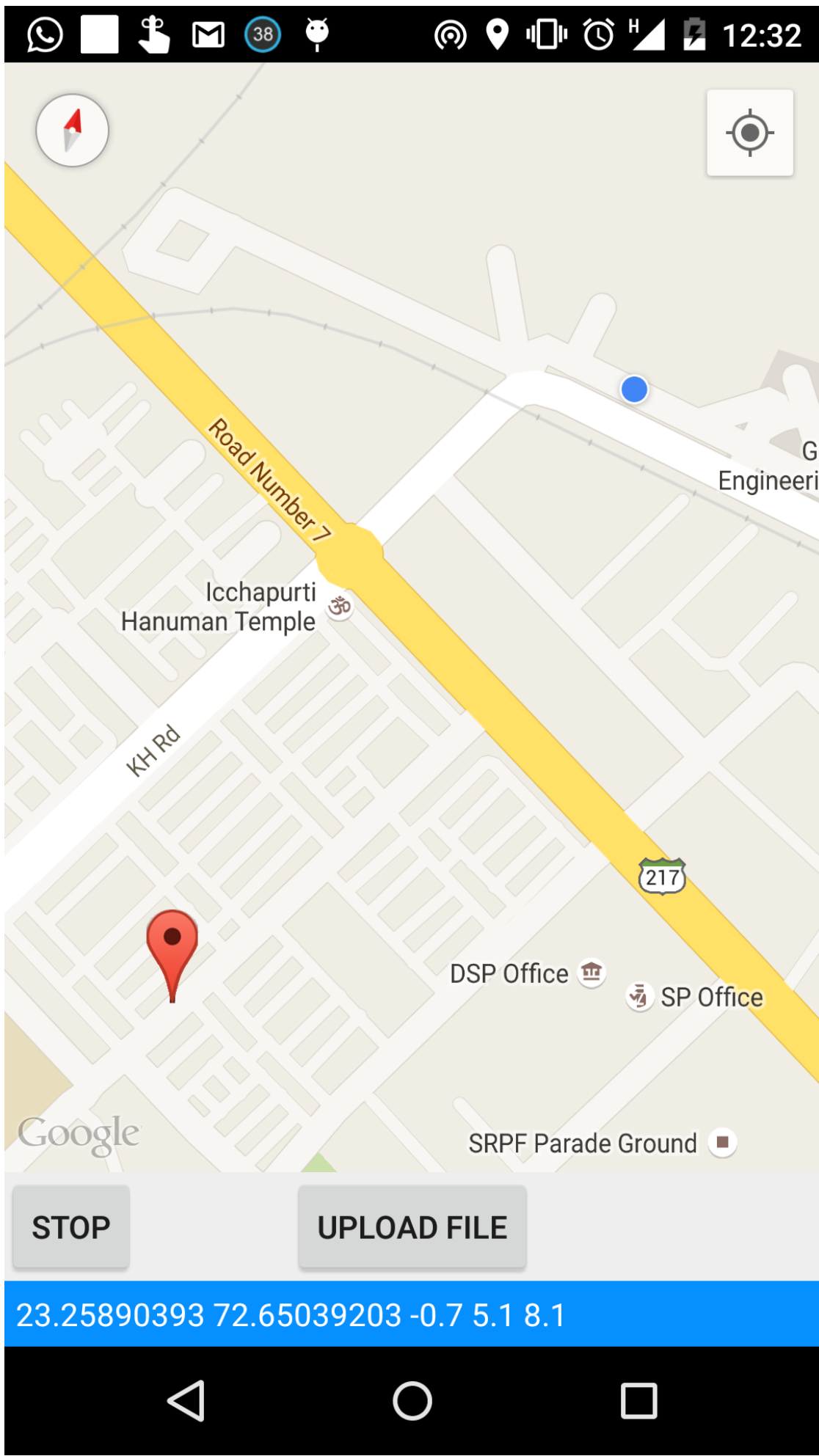
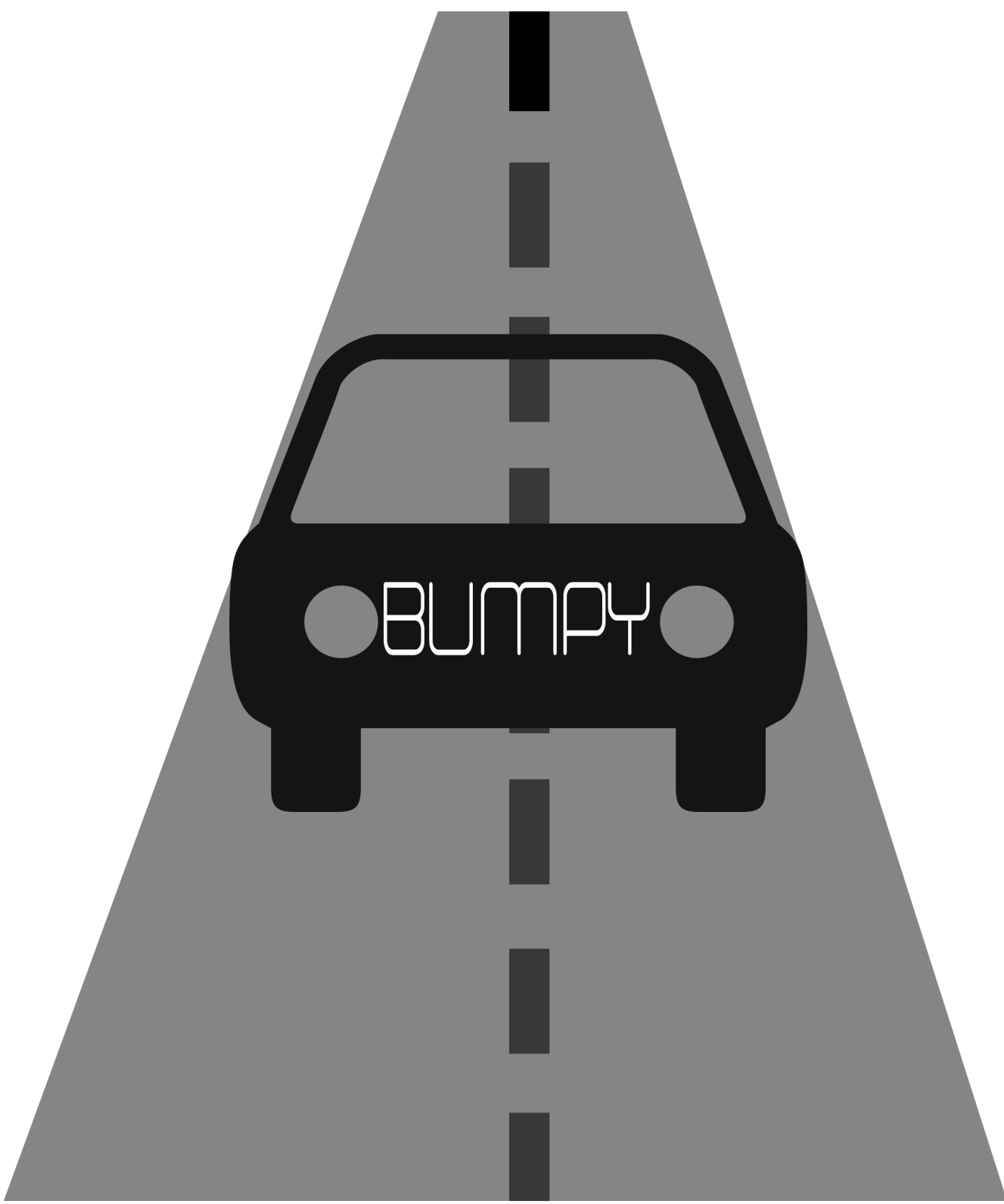


Figure 1: A glimpse of Bumpy.

WHAT?

Bumpy is an android application made just for your ease. It collects the information about the road you are traveling on and detects the speed breakers. It also alerts you about the breakers ahead.



RESULTS

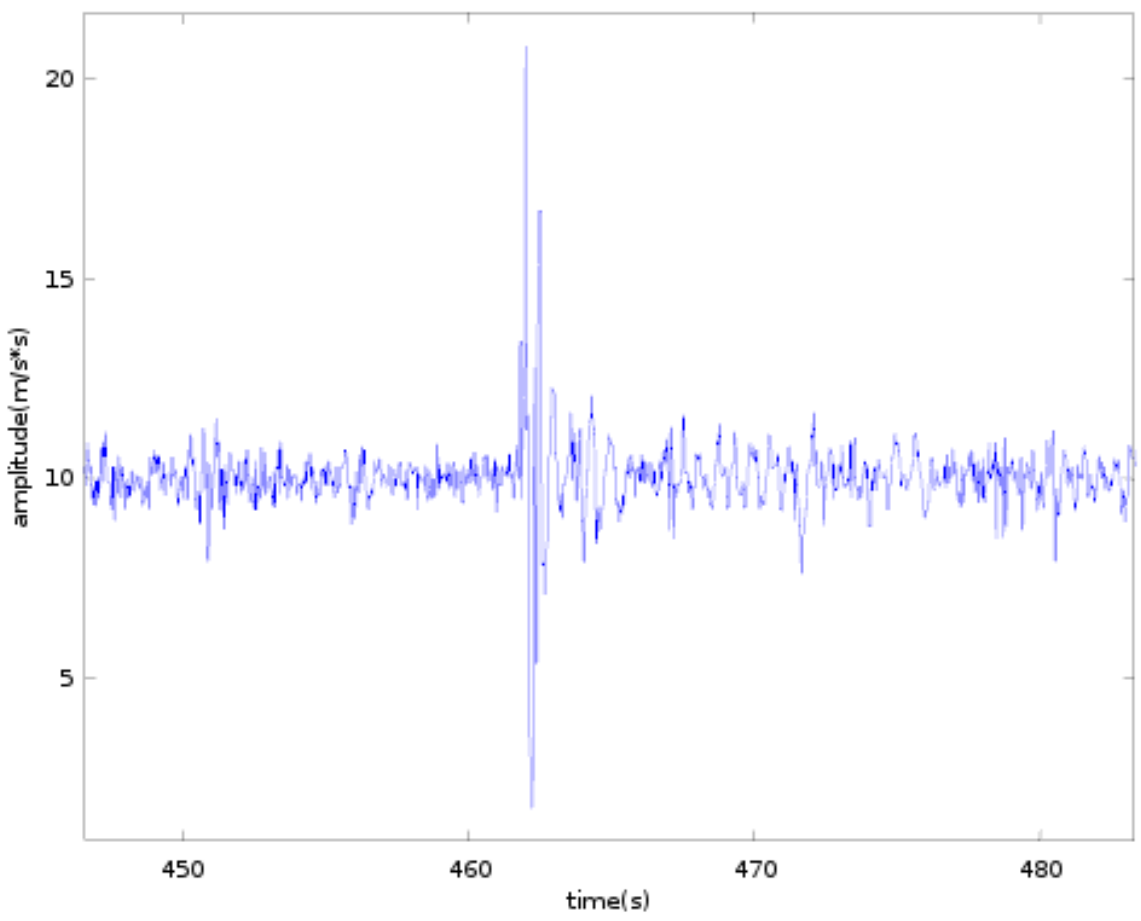


Figure 2: Here the peak represents a speed breaker.

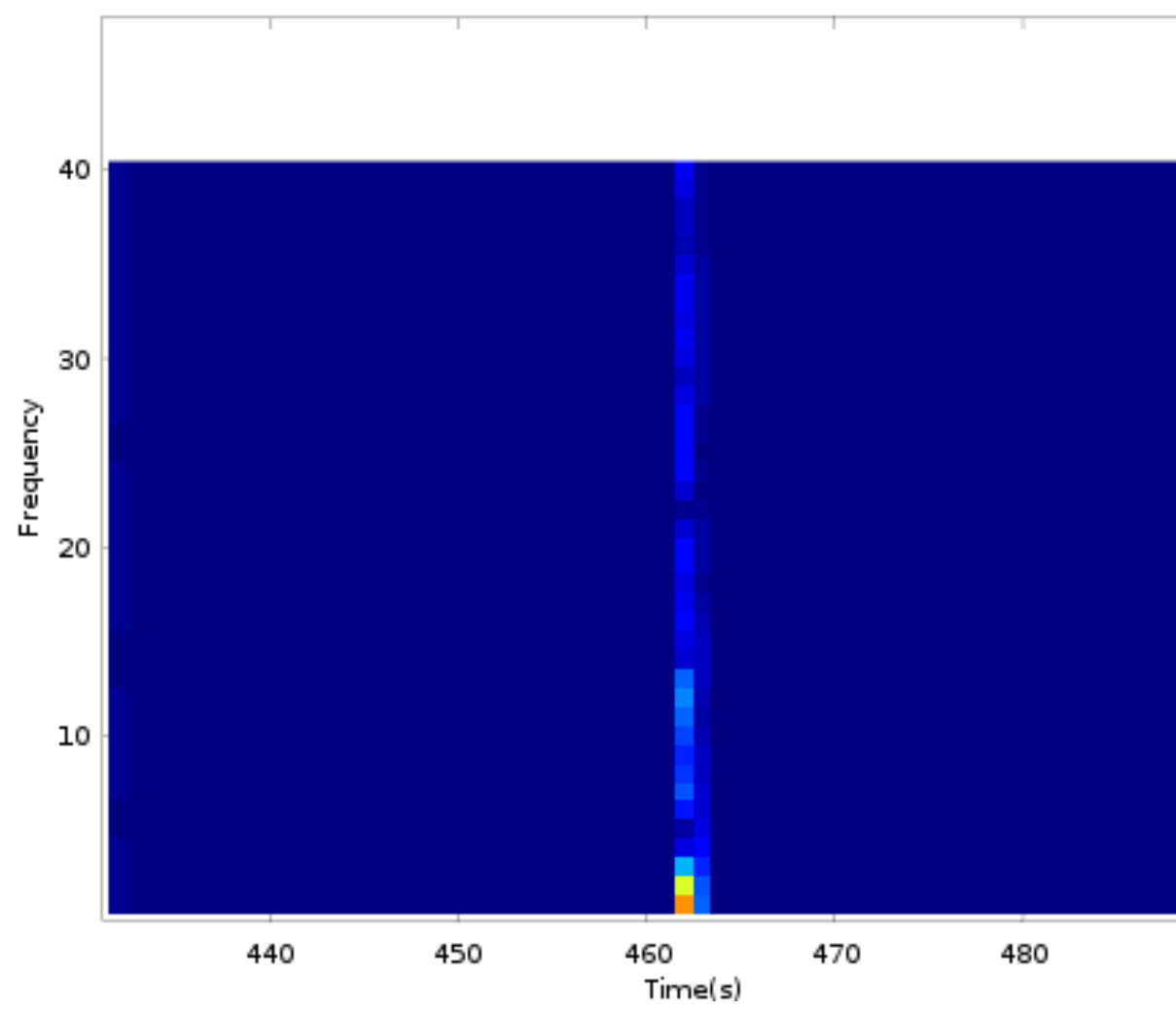


Figure 3: The Spectrogram of the same readings.

HOW?

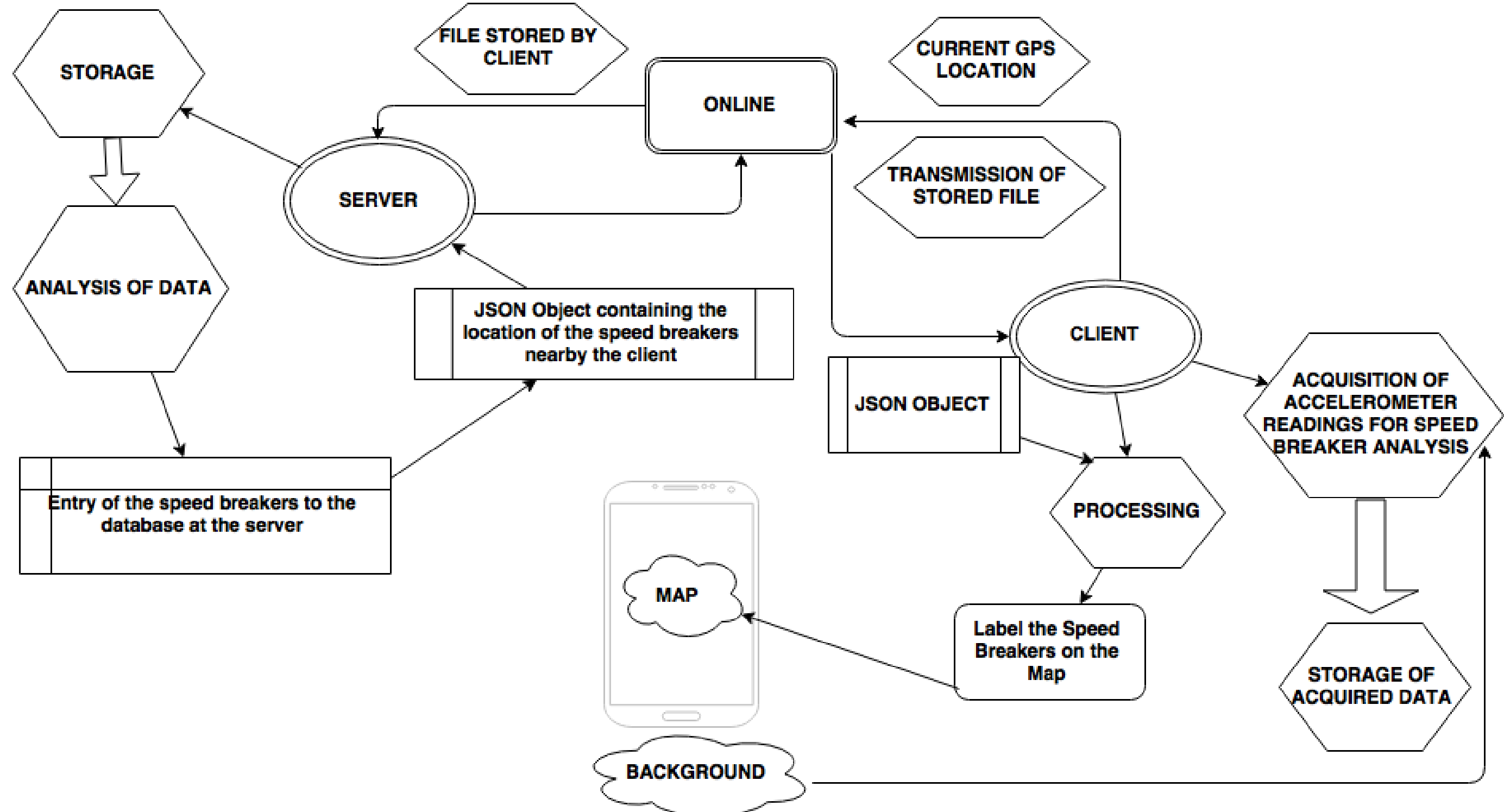


Figure 4: Figure caption

FUTURE WORK

- Include an off road tracker.
- An attention checker to keep a check on the driver using face detection.
- Adjust Bumpy's alerts according to weather and time.
- Introduce auditory alarms.

Tools Used



LINKS

- <https://docs.djangoproject.com/en/1.8/>
- <https://celery.readthedocs.org/en/latest/>
- <http://onlinevideolecture.com/?university=derek-banas>
- <https://www.youtube.com/watch?v=ObYbdoVV7Hg>