



RED CROSS TELEASSISTANCE

PROJECT DIEGO

Detección Inteligente de
Eventualidad con
Geolocalización Operativa

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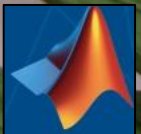
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Objectives

- Low Implementation Cost
- Effective detection system
- 24/7 Monitoring
- Geolocation
- Instant Emergency Call



DEVELOPMENT LINES

Mobile APP

- All the system on the mobile phone

Easy Use

- App must be clean and intuitive

Population Focus

- Development focus on senior citizens

Intelligent functionality

- Must adapt to the user



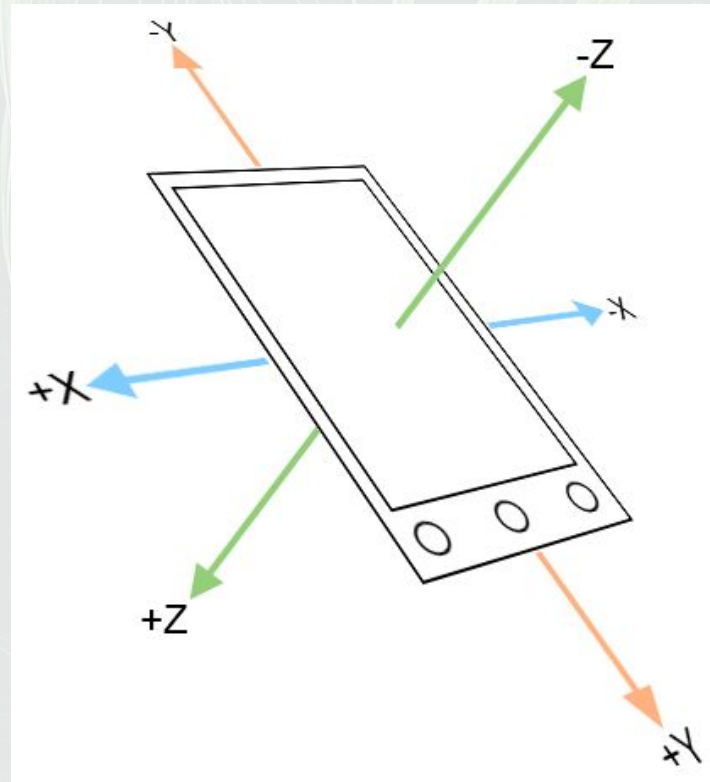


MAIN DEVELOPMENT

- Sensors to be used
- Way to read it
- Filtering signals
- Machine learning development
- Other information to complete the project



SENSORING



Accelerometer

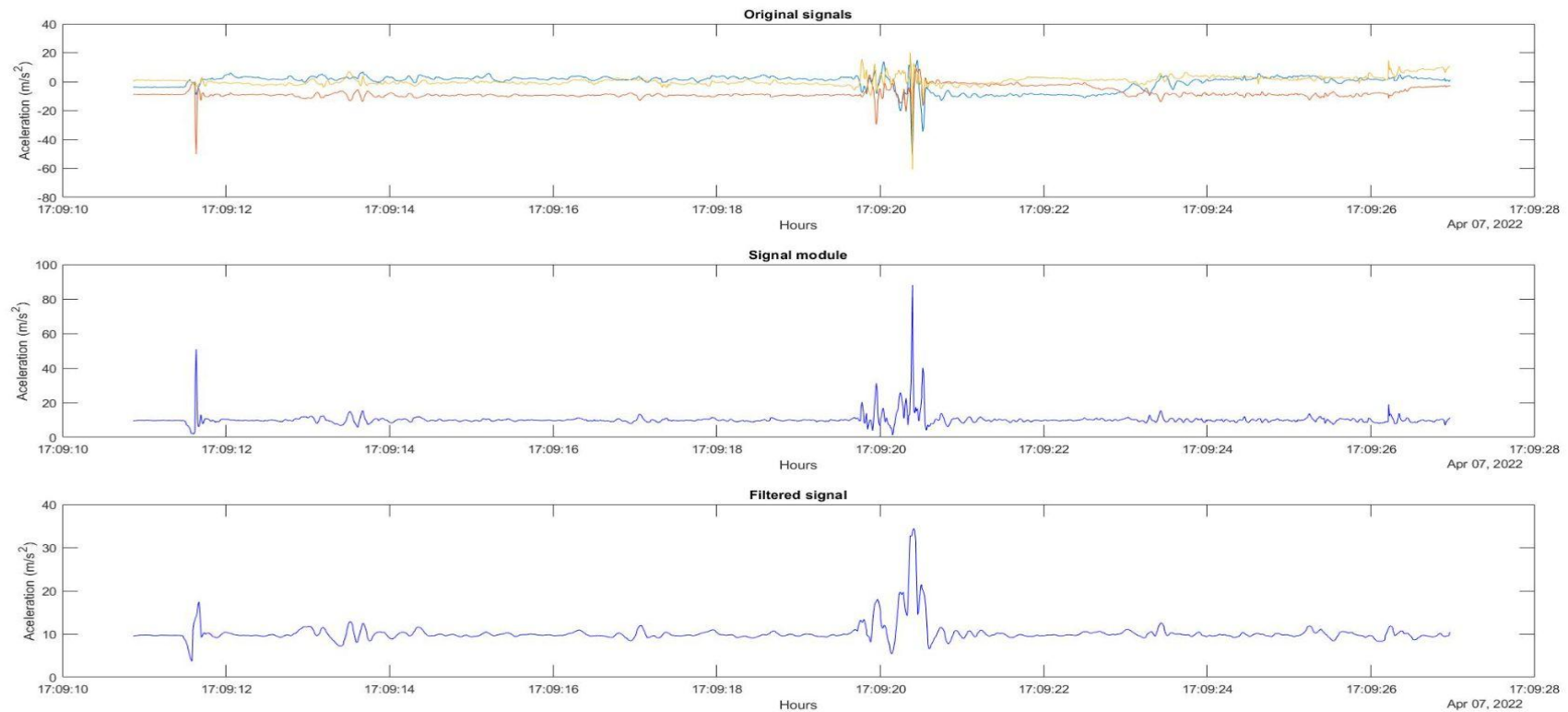
- 3 Axes
- 100 Hz sampling

GPS

- Latitude
- Longitude
- Height
- Mapping



Filtering



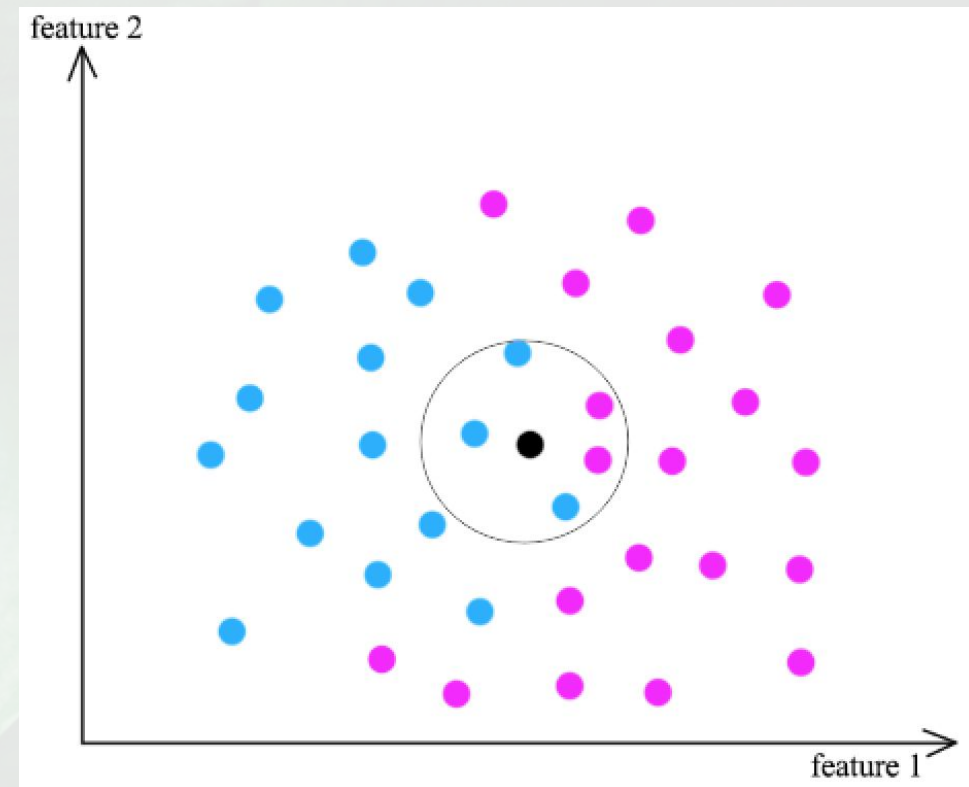
MACHINE LEARNING

Classification Model Training

- Knn Classifier
- Number of Neighbors

Testing

- Mean Square Error -> $8.3333e-04$
- Number of Neighbors -> 2
- Accuracy -> 99%



Thanks!

TEAM 1

UC3M

GICME HAS DONE IT AGAIN

