

# Detecting bike-lane quality

## Rijkswaterstaat

Marco Aiello (Groningen University)

Robert Boensma (TU Twente)

Margriet Jansz (STW)

Wouter Meulemans (TU Eindhoven)

Hannes Mühleisen (CWI)

Ana Oprescu (UvA)

Ugo Vespiere (Leiden University)

Kaifeng Yang (Leiden University)

# Problem description

Bike-lane quality → improve safety

Volunteered information from cyclists



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No input while cycling

Minimal effort from cyclist



# Our focus

Sensor data ↵ road quality ?

Social media



Bike-fixed device



Smartphone



# Gathering data

Phone sensor data

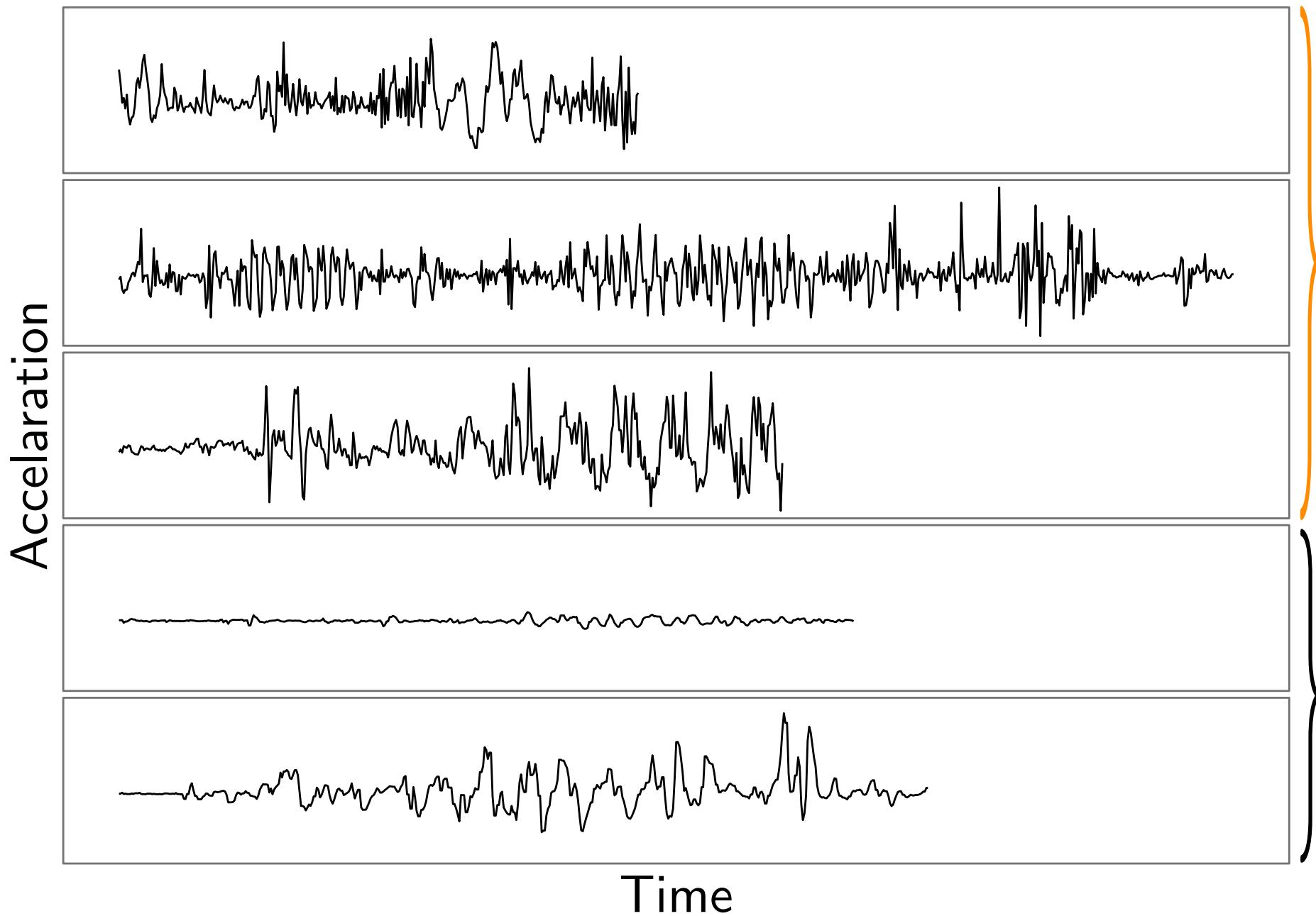
2 bikes

4 cyclists

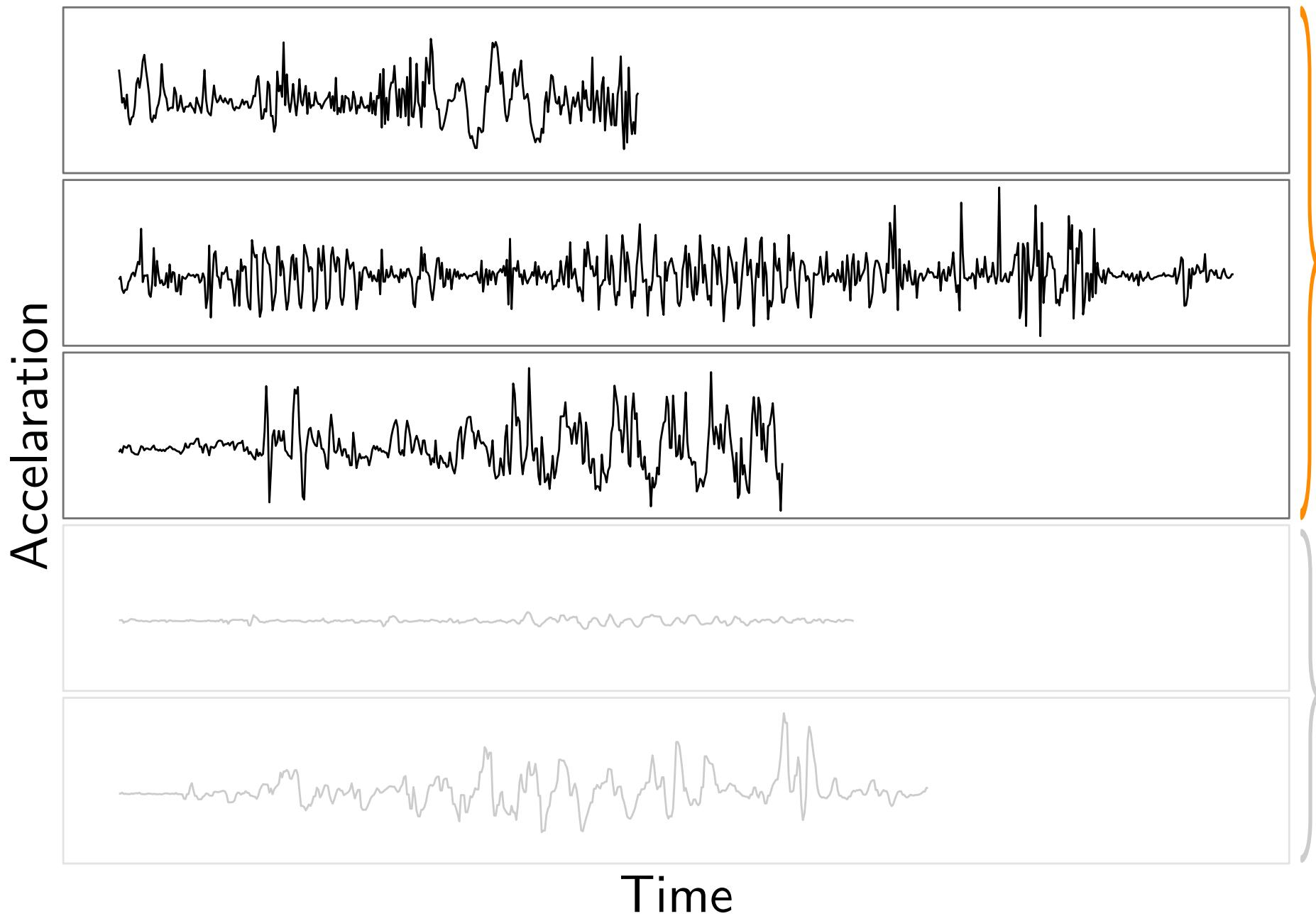
Smooth with damage, sidewalk



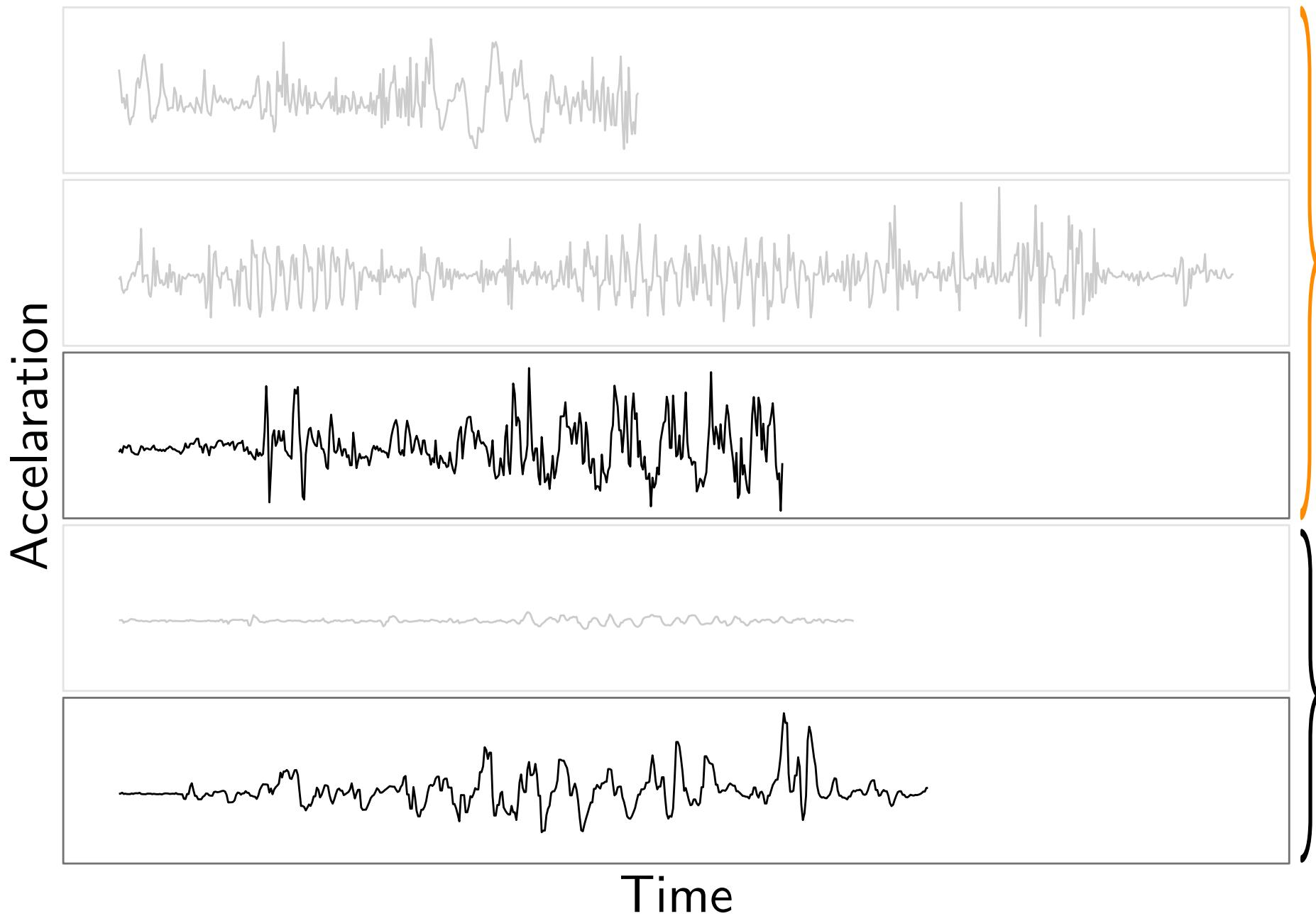
# Preliminary results



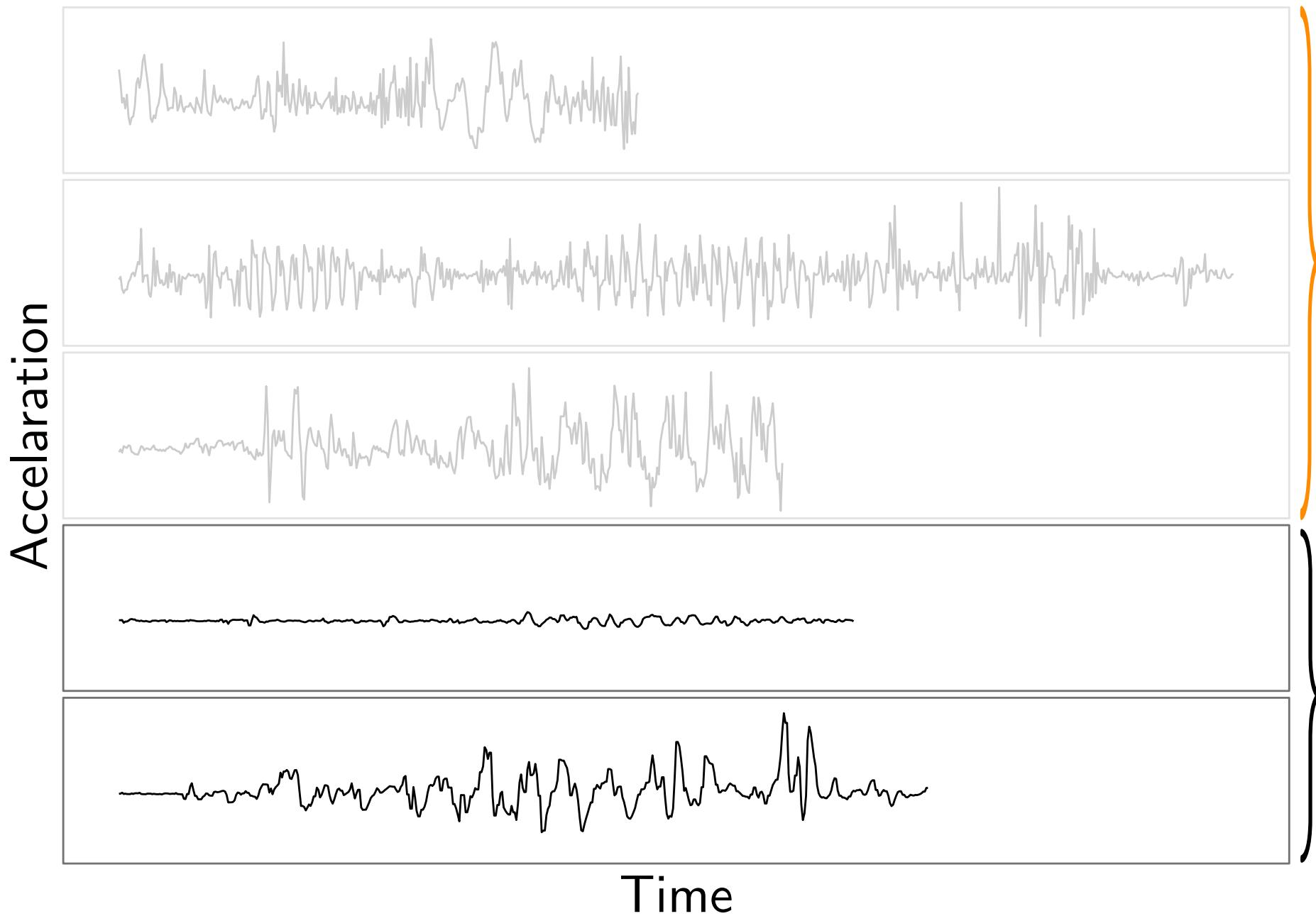
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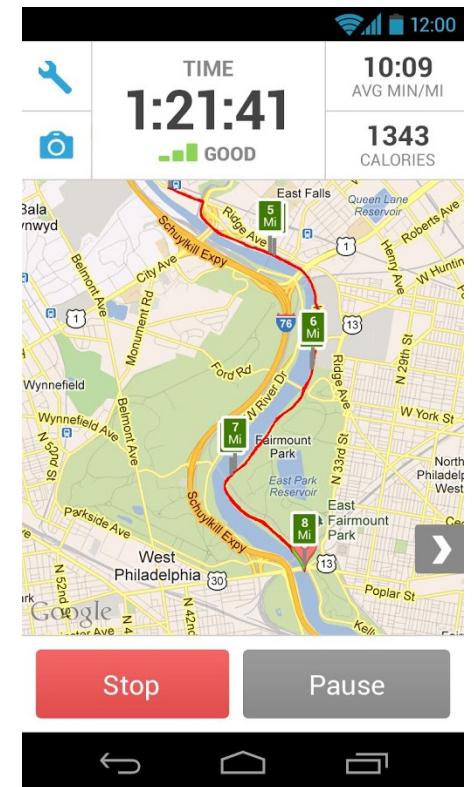
# Preliminary results



# Considerations

Cyclist's interest

Reaching audience



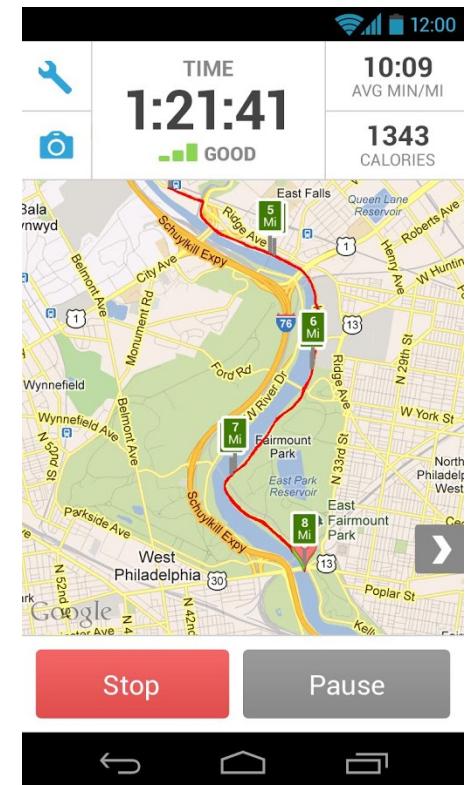
# Considerations

Cyclist's interest

Reaching audience

Investment 

Post-riding evaluation



# Considerations

Cyclist's interest

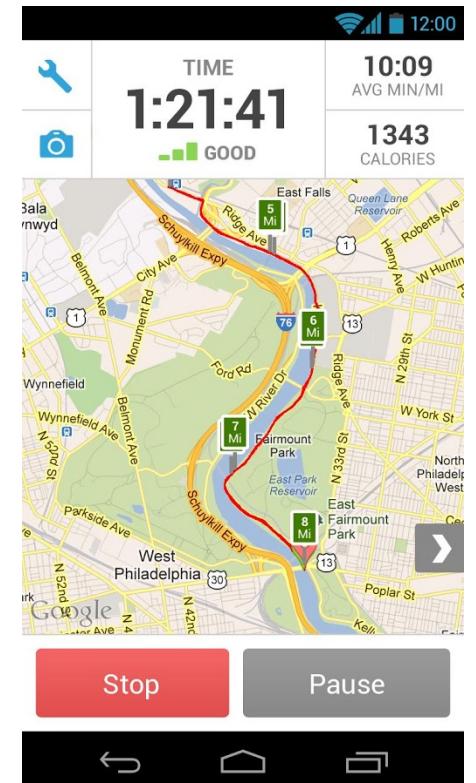
Reaching audience

Investment 

Post-riding evaluation

Seasonal effects

Privacy



# Outlook

Further analyze data

Identify pitfalls and cyclist's interest

Limited user input

Other quality criteria

