

Computers everywhere. Opportunities for healthcare

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THE UNIVERSITY OF
MELBOURNE

Brief history of computing



1960's



1980's



2000's

3 “Waves” of computing



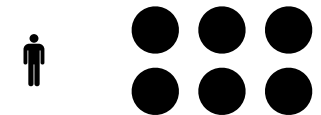
Capabilities

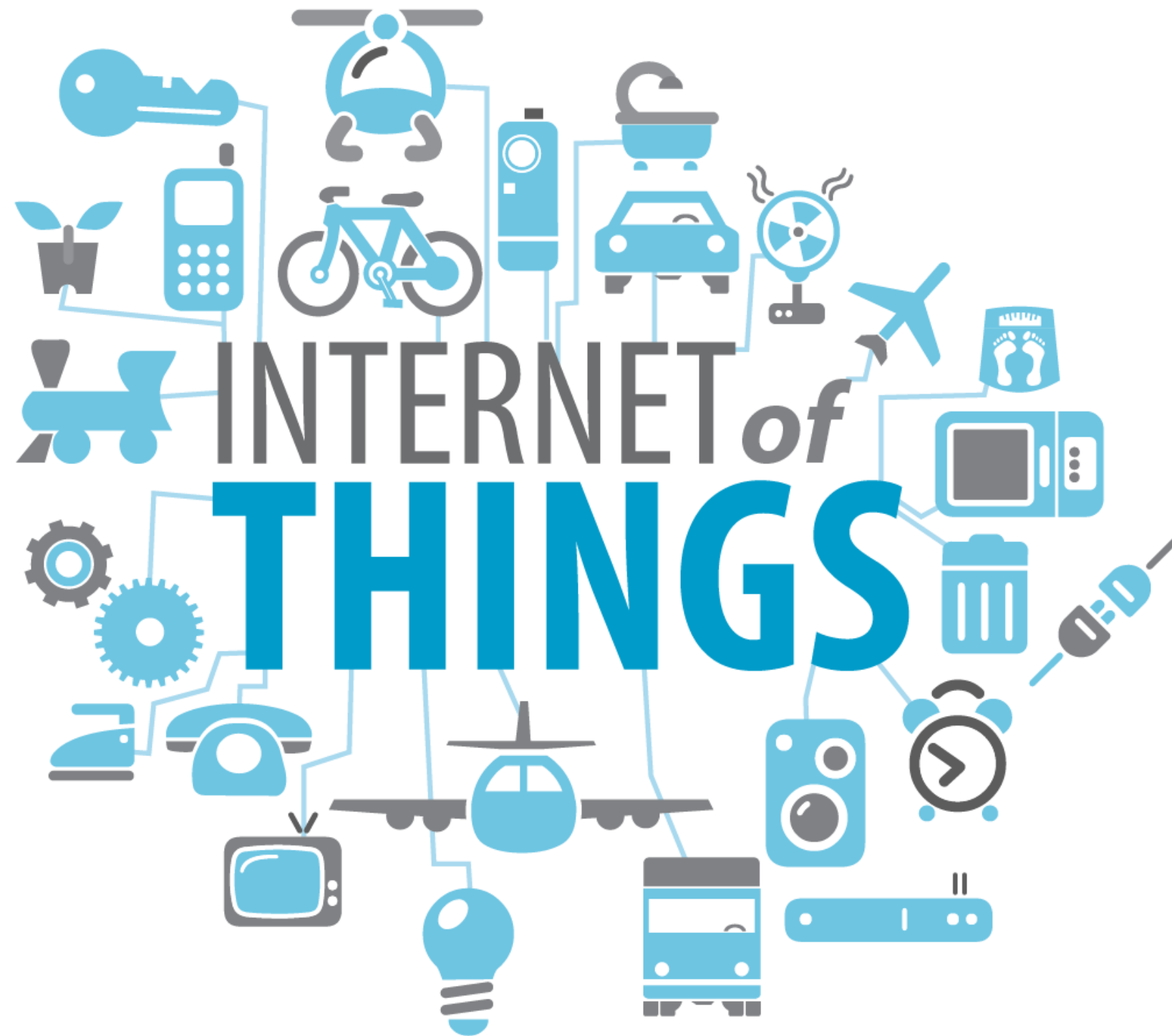


Size

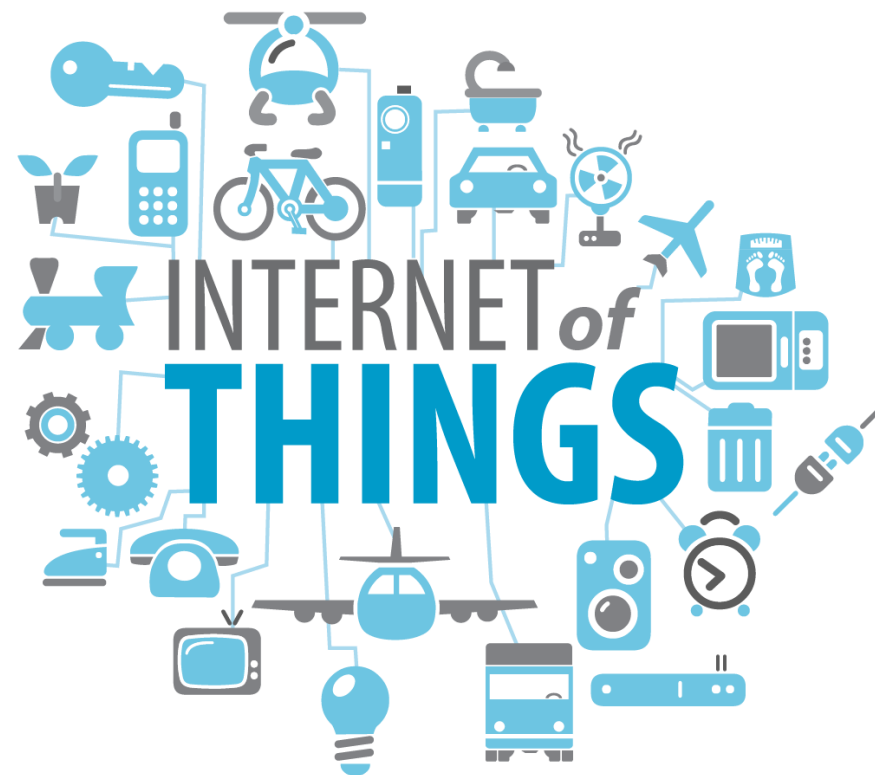


Usage





Understand people -> build better technology

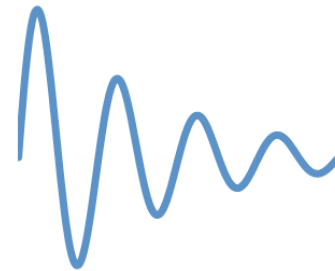


Study technology -> better understand people

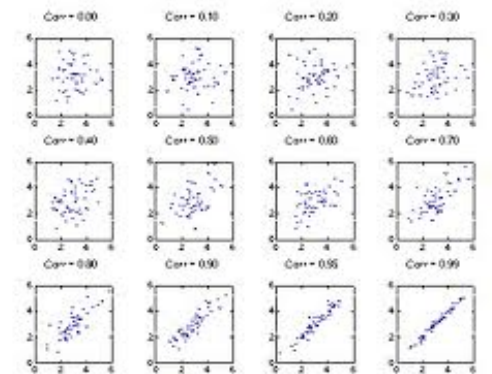
Modus operandi



Smartphone/Sensors



Calculate metrics



Establish correlations
Describe behaviour



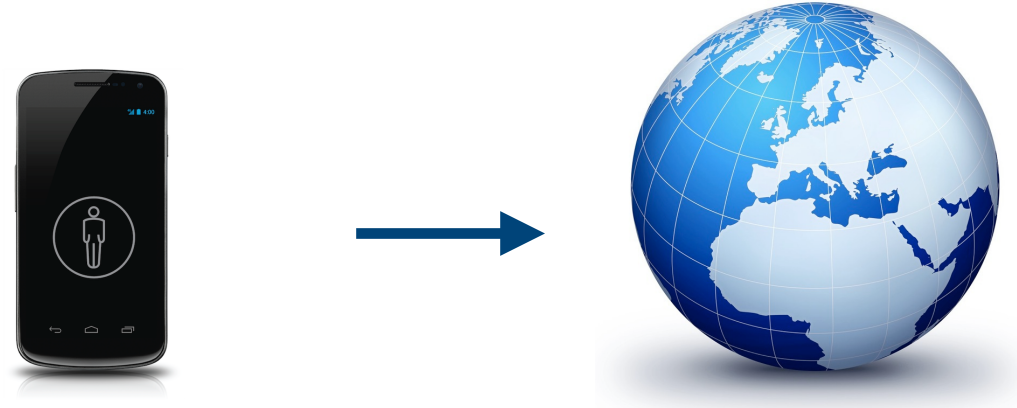
Behaviour, attitudes,
questionnaires, etc.



Calculate metrics

Sources

Social Media
Smartphone use
Smart city
Interaction



Insights

Happiness
Personality
Habits
Exposure

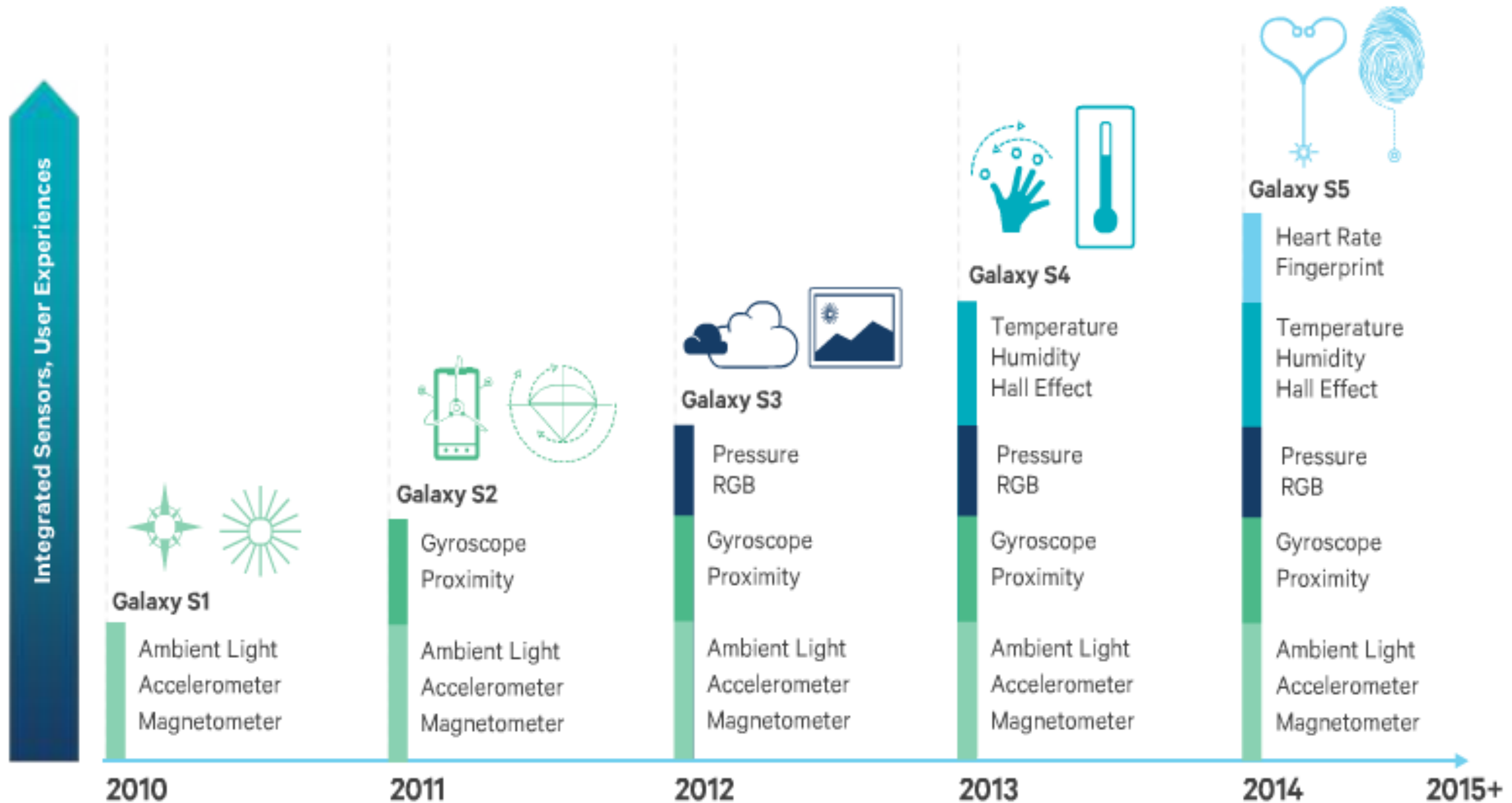
Methods

Smartphone sensing
Crowdsourcing
In-the-wild methods

Smartphones for science

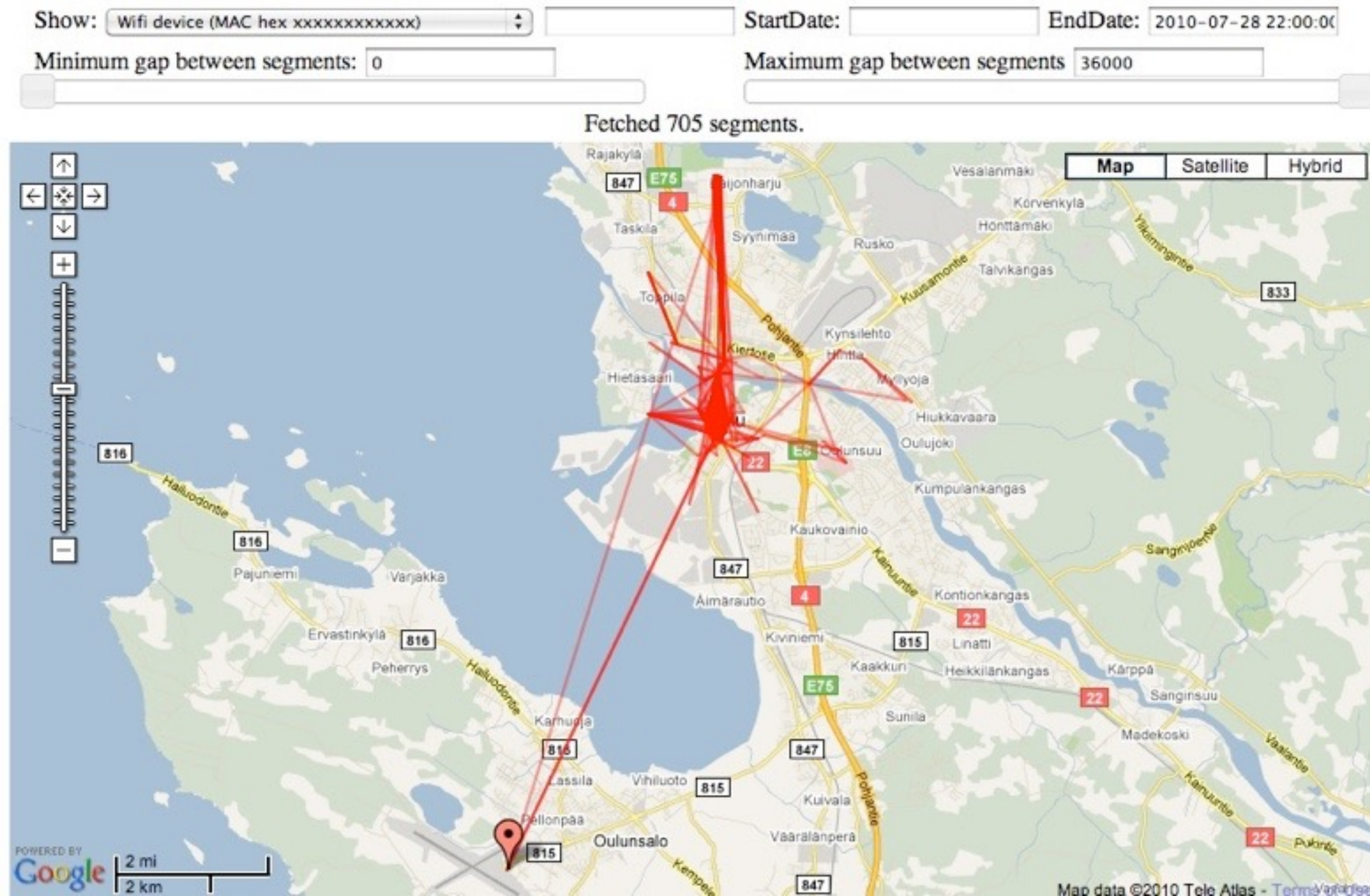


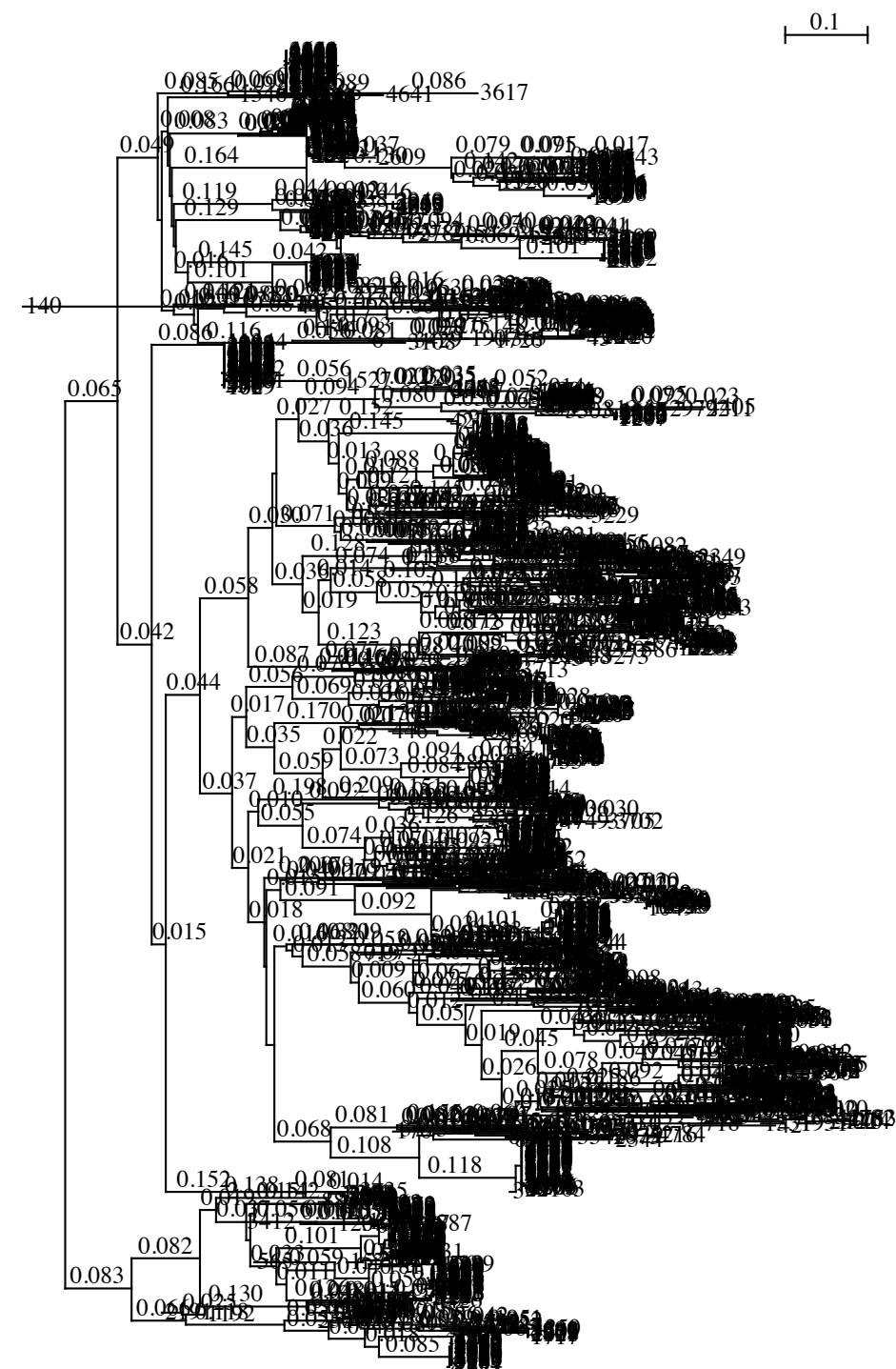
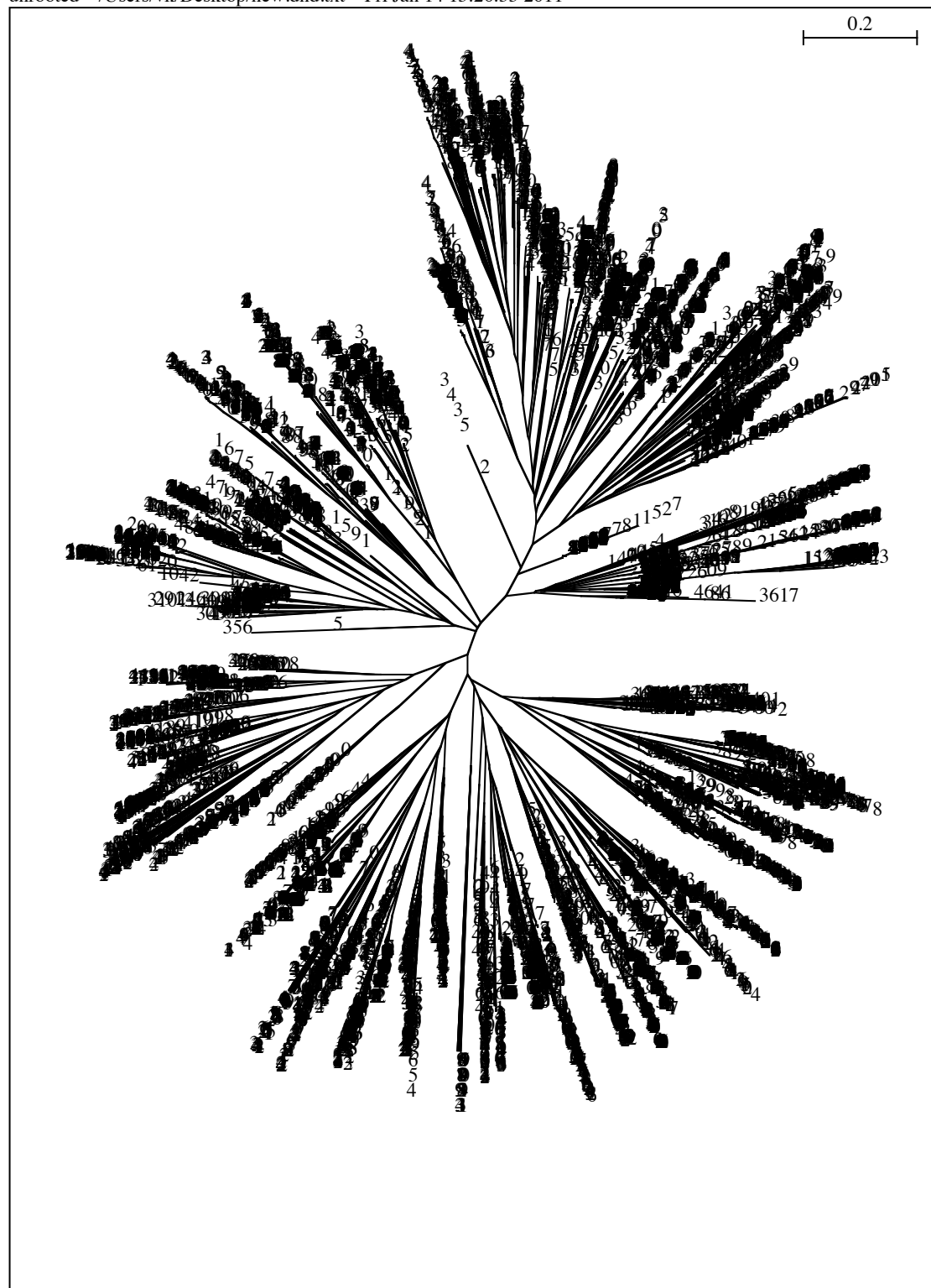
Sensor growth in smartphones



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Profiling people





Lifestyle sensing



What can we sense?

Hardware



Software



Human



Meta

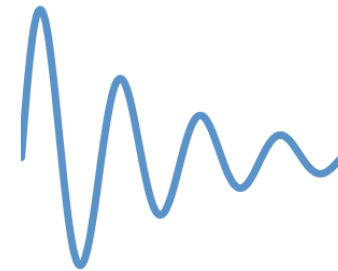




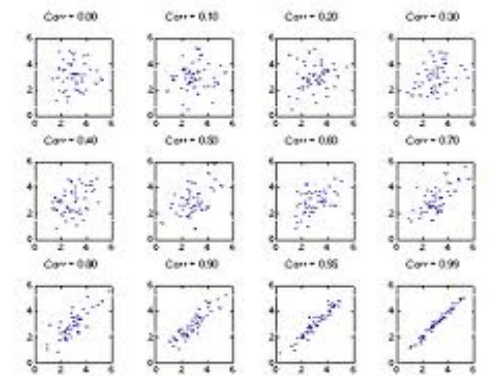
The future



Digital phenotype



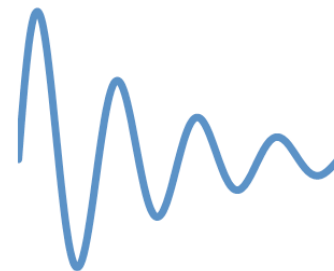
Calculate metrics



Establish correlations
Prescribe treatment



Treatments



Calculate metrics



The end!

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