

# Human mobility analysis and simulation with Python

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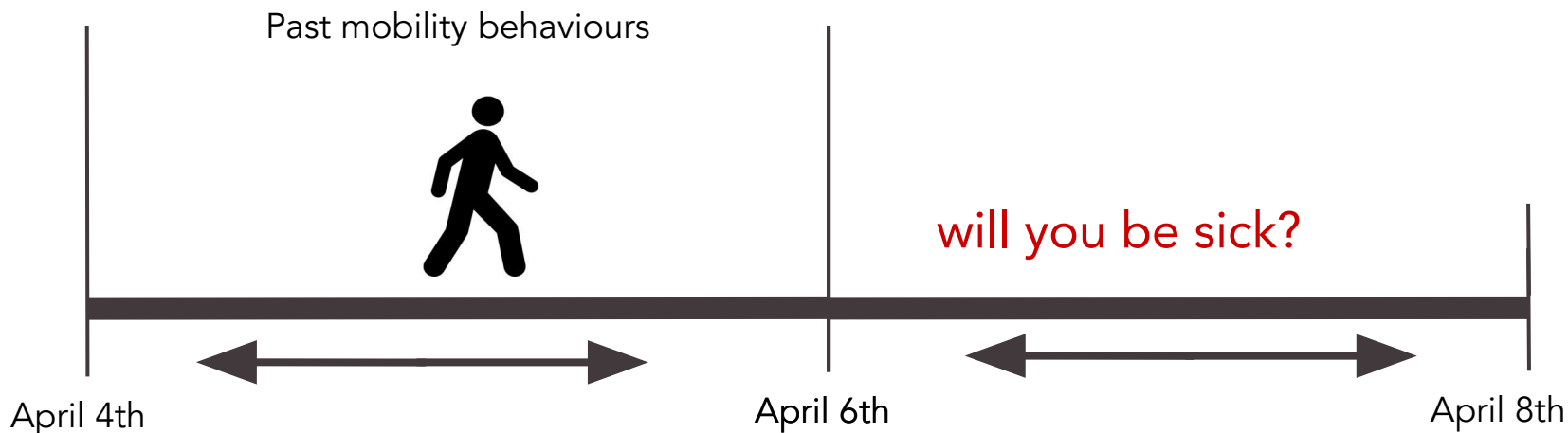
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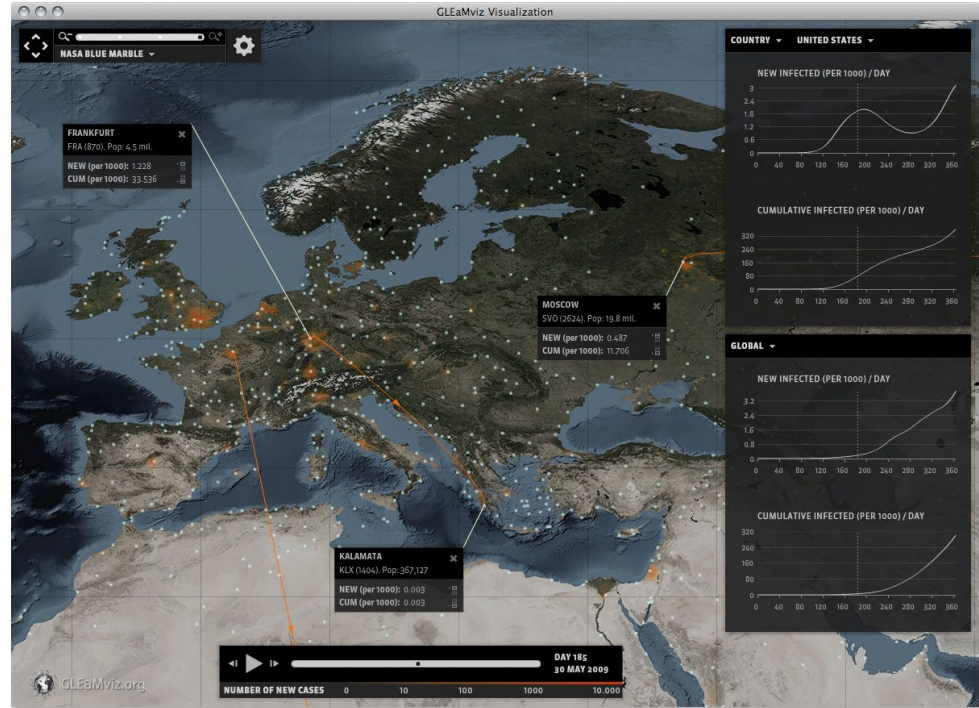
# Predict flu-like symptoms

Individual mobility behaviours is used to predict the future presence of flu-like symptoms (e.g. cold, fever and cough).



Are you getting sick? Predicting influenza-like symptoms using human mobility behaviors (Barlacchi et al.)

# Forecasting flu



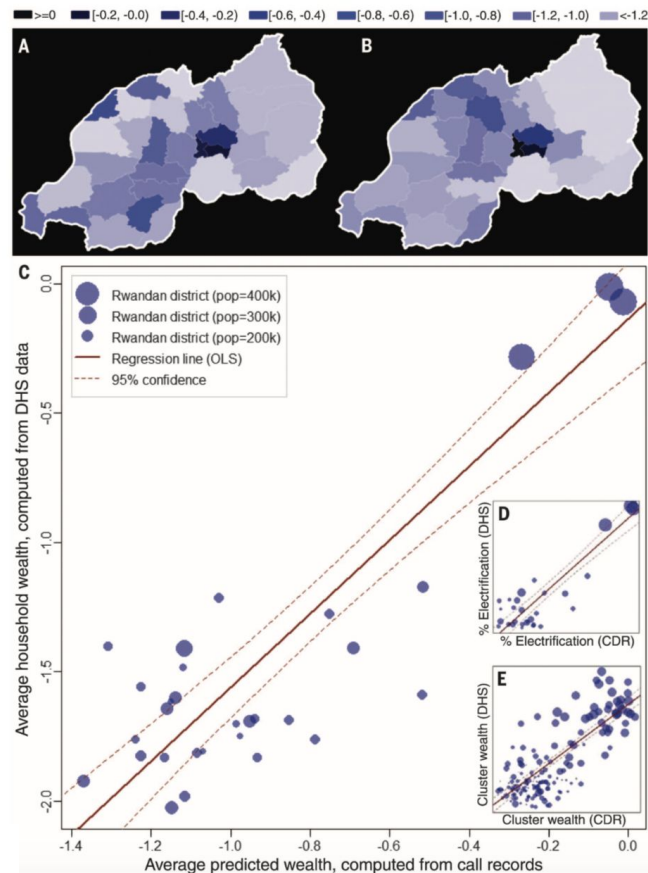
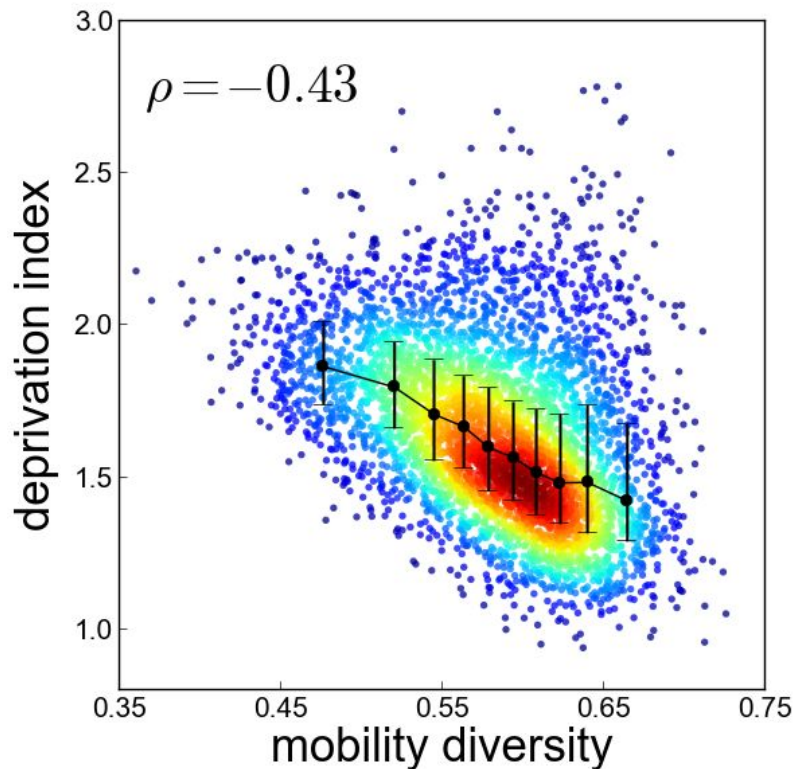
The GLEaMViz computational tool, a publicly software to explore realistic epidemic spreading scenarios at the global scale.  
(Van den Broek W. et al.)

# Monitoring of poverty

In resource-constrained environments censuses and household surveys are rare and difficult to obtain.

- Individual past mobile phone behaviour, including mobility, can be used to infer his or her socioeconomic status.
  - The predicted attributes of millions of individuals are used to reconstruct the distribution of wealth of an entire nation
- Predicting poverty and wealth from mobile phone metadata  
(Blumenstock et al.)

# Mobility and government data



An analytical framework to nowcast well-being with mobile phone data (Pappalardo et al.)



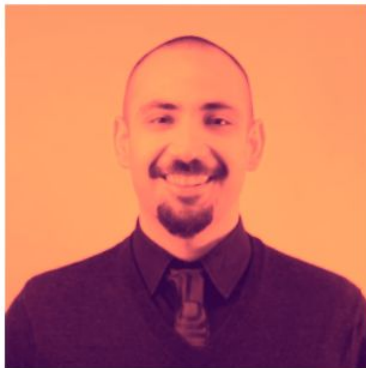
## **Current developments**

predictive models

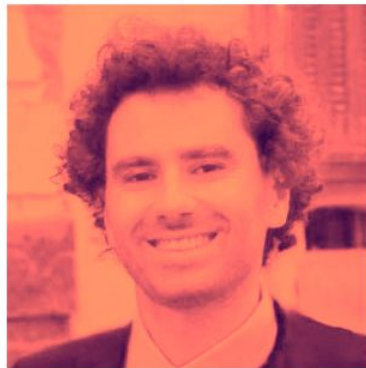
visualization module

map matching

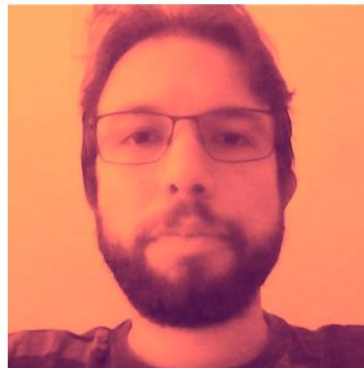
anonymization techniques



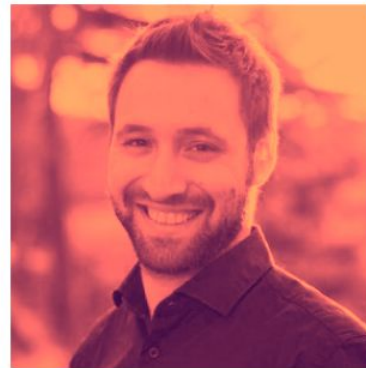
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<https://github.com/scikit-mobility/>

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# How to contribute?

contact us

open an issue

make a pull request



# Thank you!

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