**MASSACHUSETTS INSTITUTE OF TECHNOLOGY** 

# Big Data and Social Analytics certificate course

**MODULE 8 UNIT 1** Living labs



# MIT BDA Module 8 Unit 1 Video Resource

## Learning outcome:

LO2: Demonstrate an understanding of "living labs".

In Video 3, Professor Alex Pentland discusses the origin of living labs, including where the concept originally came from.



 $\label{lem:video} \textbf{Video 3: Professor Alex Pentland} - \textbf{The origins of living labs}.$ 

(To download the video, click here .)

In Video 4, David Shrier discusses the construction of living labs in terms of the frameworks, considerations, and the multi stakeholder engagement involved.





Video 4: David Shrier – Constructing a living lab. (To download the video, <u>click here</u>.)

The concept of living labs is expanded on in Video 5, where Professor Pentland explores the example of the Andorra living lab. He also discusses the insights and eventual benefits that came out of this living lab.



**Video 5: Professor Alex Pentland** – The Andorra living lab. (To download the video, <u>click here</u>.)





In Video 6, Arek Stopczynski talks about the shift from studying data to studying populations, with specific regard to the Copenhagen Network Study. Although it has been mentioned earlier in the course, in this video Arek Stopczynski discusses the Copenhagen Network Study in greater detail.



**Video 6: Arek Stopczynski** – From studying data to studying populations. (To download the video, <u>click here</u>.)

If you are interested, the paper titled "<u>Measuring Large-Scale Social Networks with High Resolution</u>" provides a more detailed exploration of the data-types measured, the technical infrastructure in terms of both backend and phone software, and the outlines of the deployment procedures.

### Note:

The reading provided has been included for enrichment purposes only, and will not form part of the assessments within this module.

## You are now ready to apply your knowledge

Now that you've engaged with Videos 3, 4, 5, and 6 in this resource, you are ready to apply your newly gained knowledge by completing the corresponding activity in the Apply unit. You can access this activity by navigating back to your module learning path, or click to access it directly from here:

8.4 Assessment Quiz: Understanding living labs



# **Reference list**

### Video 5

Leng, Yan, Alejandro Noriega, Alex 'Sandy' Pentland, Ira Winder, Nina Lutz, and Luis Alonso. 2016. "Analysis of Tourism Dynamics and Special Events through Mobile Phone Metadata." Proceedings of the Bloomberg Data for Good Exchange (D4GX) Conference, New York City, NY, September 25.

Leng, Yan, Larry Rudolph, Alex 'Sandy' Pentland, Jinhua Zhao, and Haris N. Koutsopolous. 2016. "Managing travel demand: Location recommendation for system efficiency based on mobile phone data." Proceedings of the Bloomberg Data for Good Exchange (D4GX) Conference, New York City, NY, September 25.

#### Video 6

Stopczynski, Arkadiusz, Vedran Sekara, Piotr Sapiezynski, Andrea Cuttone, Mette My Madsen, Jakob Eg Larsen, and Sune Lehmann. 2014. "Measuring Large-Scale Social Networks with High Resolution." PLoS ONE 9: e95978. doi:10.1371/journal.pone.0095978.