



UNIVERSITÉ  
DE GENÈVE



CSIC  
CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS



Université  
de Paris



# Crowd4SDG

## **Citizen Science, Data Science and the SDGs: the case for publicly generated non-traditional data sources**

François Grey, CUI

Data Science Days, 16 September 2021



*This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 872944*



# Project Inspiration



Partnership with CERN and UNITAR  
Hosted at the CUI since 2014

For crowdsourcing to achieve its full potential, governments will need to support projects that promote public participation in measuring progress towards the SDGs. National statistics offices must develop best practices for integrating crowdsourced data.

“SDG indicators need crowdsourcing”  
N. Seth and Y. Flückiger, Nature, 23 March 2016  
(<https://www.nature.com/articles/531448c>)



# SDGs: a quantitative framework



17 Goals

**3.1** By 2030, reduce the global maternal mortality ratio to less than 70 per 100k live births.

169 Targets

**3.1.1** Maternal Mortality Ratio

China  
2015  
27/100k

230 Indicators



# Crowd4SG Project Mission

Assess whether, to what degree and according to which scientific standards **citizen science** can contribute to :

- 1) **tracking progress** towards the SDGs;
- 2) generating **grassroots innovation** for the SDGs.



# Generating data for the SDGs

Analysis of social media posts about mask compliance:

- **470,255 tweets** filtered by AI
- **42,978 images** extracted
- **25,541 images geolocated** automatically
- **2461 images analysed** by crowdsourcing

Data set published on Zenodo:

[Crowd4SDG-VisualCit COVID-19 behavioural indicators](#)

Paper published in IEEE Xplore:

[Image-Based Social Sensing: Combining AI and the Crowd to Mine Policy-Adherence Indicators from Twitter](#)

Are there people in this image?  
 YES  NO  NOT SURE

Are the people wearing masks?  
 YES  SOME OF THEM  NO  CANNOT TELL

If so, which type?  
 Scarf  Cloth  Surgical  FP2  FP3  
 Gasmask  Other  Cannot tell

Are the people wearing the mask correctly?  
 YES  NO  ONLY SOME OF THEM  CANNOT TELL  
 NOT SURE

Open Source crowdsourcing platform used:  
[Citizen Science Project Builder](#)

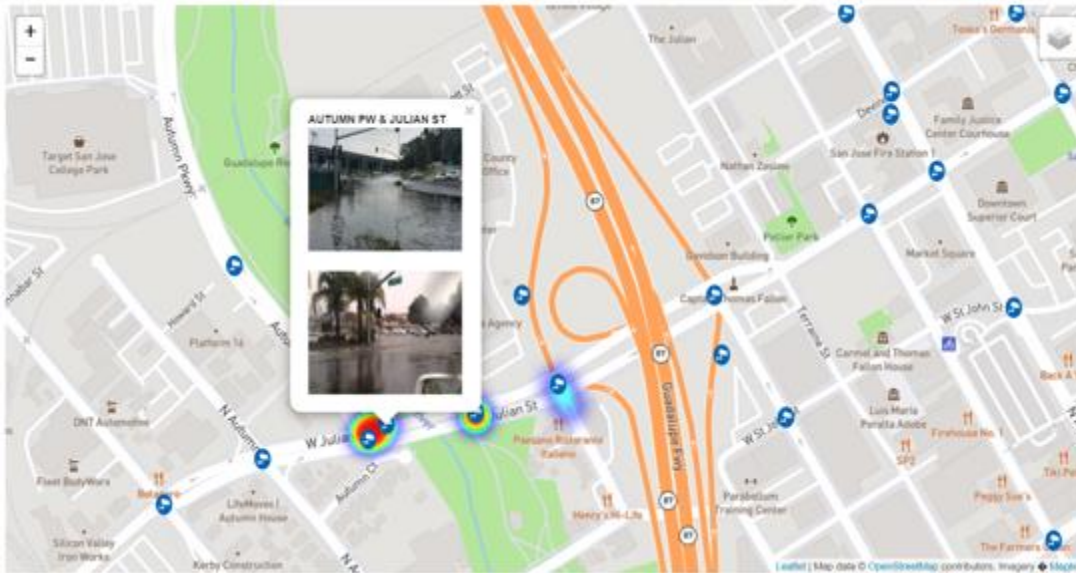
Developed by Citizen Cyberlab and  
Citizen Science Center Zurich

**Available to all UNIGE researchers** – no coding required!



# Generating innovation for the SDGs

Project Flood Finder  
Student project from Crowd4SDG  
Based on crowdsourcing and AI



Deeya Vadia  
16-year-old high school student  
Led the Flood Finder team



Deeya is first author on a poster about her project accepted at ISCRAM 2021  
Flood Finder won competition to join social incubator run by Code for America






# Open Call for Projects

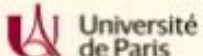
On the Goodwall social network: <https://www.goodwall.io/tags/Open17ClimateGender>

## #Open17ClimateGender

Pitch your idea for tackling climate and gender challenges with crowdsourcing solutions

 30 Deadline 30 September 2021, midnight CEST

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# Crowd4SDG Target Audience

