

# Crowdsourcing and AI

Part B  
Introduction

1/03/2021

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# About me



University of Geneva since 2011  
MER (Senior Lecturer) at CUI since 2016  
PhD, Computer Science, Artificial Intelligence  
+15 years of experience in software/hardware  
Private sector experience including start-ups

Head of the SDG Accelerator since 2018  
Technical Coordinator of the Crowd4SDG EU project

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# Past Experience



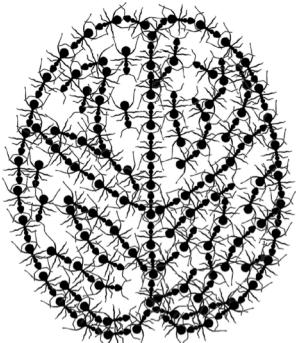
2004

**mystrands**

2006

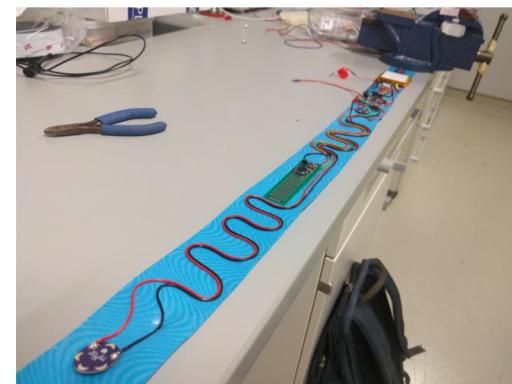


Bio-inspired Mechanisms for  
Self-organising Systems



2011

BeltCOmpass  
ROUTING SERVICE



2016

Research Projects:  
  
Citizen Cyberlab  
DITOs  
E2mC  
Crowd4SDG

” Many people today believe that the most important new kind of information technology will be artificial intelligence (AI), embodied in robots and other software programs that do smart things only humans could do before. It’s certainly true that machines like Amazon’s Alexa and Google’s self-driving cars are getting smarter, and **it’s possible that someday, in the future, we will have artificially intelligent machines that are as smart and broadly adaptable as humans. But most experts estimate that, if this happens, it probably won’t be for at least several decades and quite possibly much longer.** In the meantime, **we will need to use AI in combination with humans who provide whatever skills and general intelligence the machines don’t yet have themselves.** For the foreseeable future, therefore, there is another way of using IT that will be even more important than just creating better AI: **creating groups of people and computers that, together, are far more collectively intelligent than was ever possible before.”**

Thomas W. Malone. Superminds 2018.

# Emergency Management

*“Every year natural disasters kill around 90 thousands people and affect close to 160 million people worldwide”*

**Environmental health in emergencies.**

**WHO [1]**

 **Koh Samui and Beyond**  
@MandalaySamui

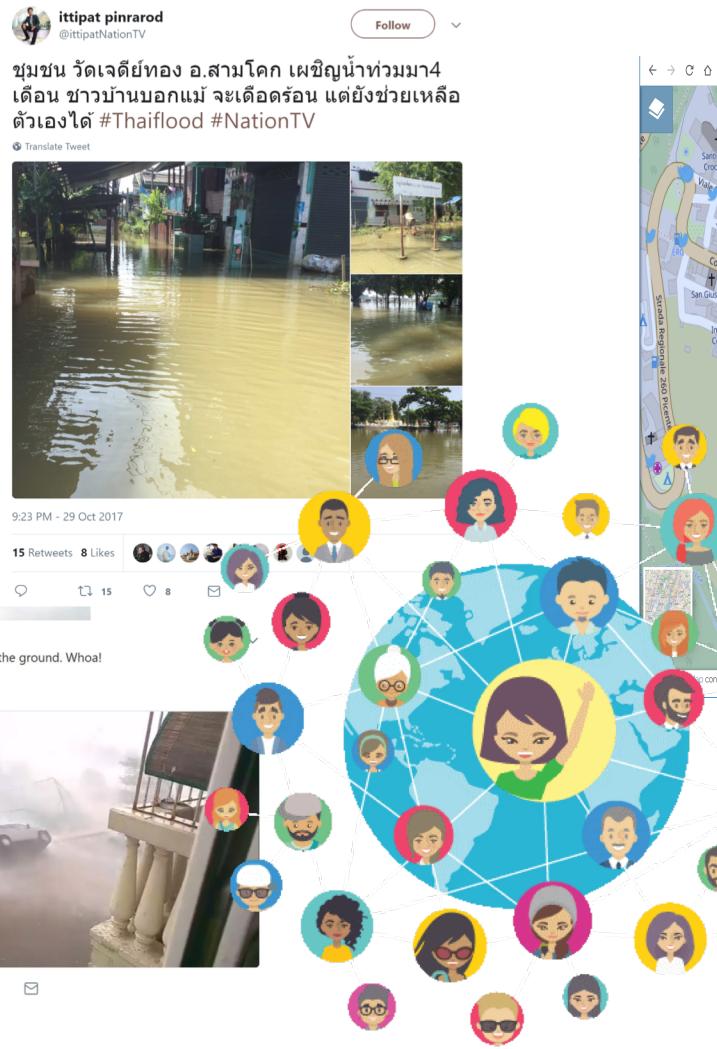
Laem Dim Market is completely flooded to the heavy rain today, but passable w #KohSamui #Thailand #ThaiFlood #WeatherNow



11:16 PM - 25 Jan 2017 from Ko Samui, 1



0:07 25.3K views



# Snake Identification

“...4.5–5.4 million people get bitten by snakes annually. Of this, 1.8–2.7 million develop clinical illness and 81 000 to 138 000 die from complications”. [2]

A large image of a green snake with its mouth open, set against a dark background. A circular inset in the upper left corner provides a close-up view of the snake's head and upper body. Below the image, the text reads:

**SNAKE IDENTIFICATION**

THIS PROJECT IS A PROOF OF CONCEPT -  
Combining AI and the wisdom of experts and  
amateur herpetologists to save lives.

**TAKE A LOOK**



## Crowdsourcing AI to solve real-world problems

Alcrowd enables data science experts and enthusiasts to collaboratively solve real-world problems, through challenges.

Round 1: Completed Round 2: Completed Round 3: Completed Round 4: Completed Round 5: 76 days left

### SnakeCLEF2021 - Snake Species Identification Challenge

Classify images of snake species from around the world

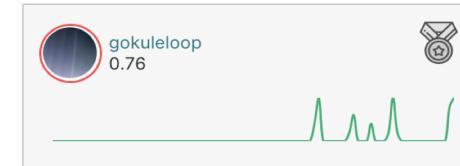
By  LifeCLEF &  Institute of Global Health 28.5k 790 48 889 23 Follow

Overview Leaderboard Notebooks Discussion Insights Resources Submissions Rules Participate

Round 1 Round 2 Round 3 Round 4 Round 5



picekl 0.794



gokuleloop 0.76

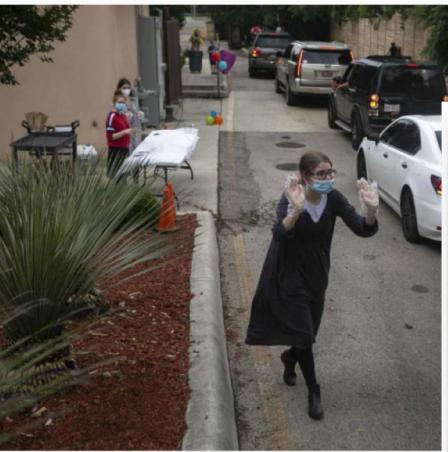


FHDO\_BCSG 0.594

Leaderboard filters

Δ #	Participants	F1_Score	Log Loss	Entries	Last Submission	Submission Trend	View	Code
▲ 01		0.794	0.565	8	Mon, 6 Jul 2020 12:52		<a href="#">View</a>	<a href="#">Code</a>
▼ 02		0.760	0.693	29	Tue, 7 Jul 2020 00:00		<a href="#">View</a>	<a href="#">Code</a>
● 03		0.594	1.064	169	Mon, 6 Jul 2020 19:54		<a href="#">View</a>	<a href="#">Code</a>

# Social distancing & Mask



A circular inset image showing several people sitting on a grassy field, each within their own designated circular area, demonstrating social distancing. The background is a dark, blurred image of a person wearing a mask.

**SOCIAL DISTANCING & MASKS**

Combining AI & Crowd to gather Policy adherence indicators from social networks

[TAKE A LOOK](#)

# Other Case Studies

- Crowdsourcing for systematic review.
- Deliberation technologies
- Team formation

# Links

- [1][https://www.who.int/environmental health emergencies/natural events/en/](https://www.who.int/environmental_health_emergencies/natural_events/en/)
- [2][https://www.who.int/health-topics/snakebite#tab=tab\\_1](https://www.who.int/health-topics/snakebite#tab=tab_1)
- <https://royalsocietypublishing.org/doi/pdf/10.1098/rsos.201273>
- <https://www.mdpi.com/1424-8220/17/12/2766/pdf>
- <https://www.aicrowd.com/challenges/snakeclef2021-snake-species-identification-challenge/leaderboards?challenge round id=329>
- <http://lab.citizenscience.ch/>