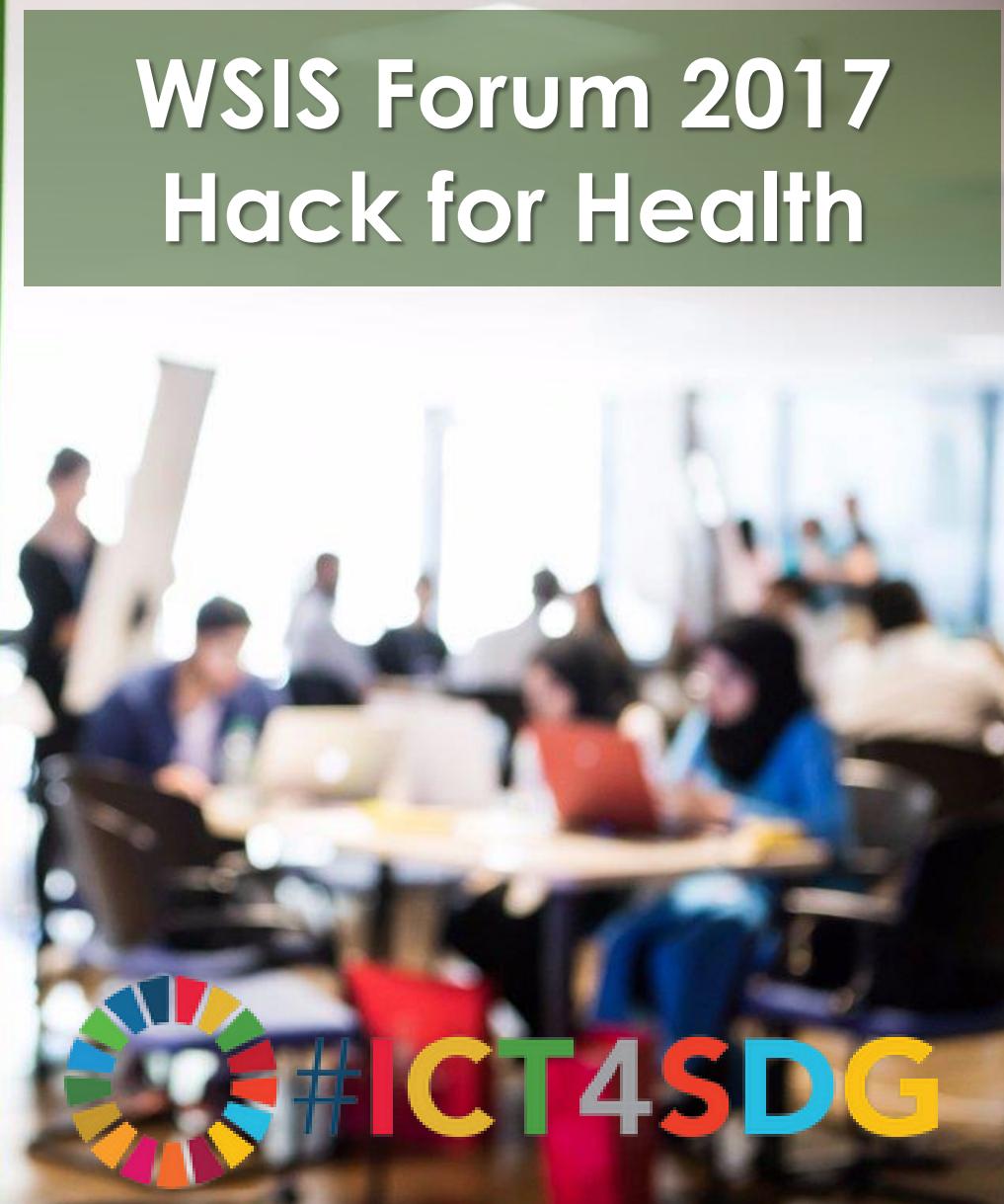




WSIS Forum 2017 Hack for Health





OVERVIEW



The Hack for Health Hackaton at the WSIS Forum was organized in association with ITU and IEEE in collaboration with Be He@lthy, Be Mobile (ITU-WHO). The hackathon resulted in the development of innovative digital solutions addressing four challenges relevant to middle-and lower-income population in cities.



PARTICIPANTS

42

total hackers

17 women, 25 men

16

nations represented including USA, Poland, Gambia, Nigeria, Tunisia, New Zealand, Bangladesh, Algeria, Switzerland, Nepal, Norway, Russia, Pakistan, Zambia, UAE, Sudan

30 + 5 + 7

30 current undergrad students

5 current grad students

7 current grad students who are also working professionals

The most common areas of study: computer science, mathematics, business, biological engineering, software engineering, chemistry, epidemiology, electrical engineering, informatics

10 + 16 + 16

10 expert developer

16 fairly proficient

16 learning to code or other types of expertise



BY REGION

A few interesting facts about who is participating

3 Region A | The Americas

5 Region B | Western Europe

7 Region C | Eastern Europe
and Northern Asia

19 Region D | The Africa

12 Region E | Asia and Australasia

CHALLENGES



Four challenges were addressed to develop an innovative digital solution to reduce exposure to common risk factors for non-communicable diseases in smart, healthy cities in middle- and lower-income cities.





SOLUTIONS

A photograph showing four people, three men and one woman, working together on laptops at a conference booth. They are all wearing lanyards with badges. The woman is wearing a blue hijab. They are looking at their screens and discussing something. In the background, there are yellow walls and a red cross symbol. A green banner on the right side of the image partially reads "WORLD SUMMIT".

Innovation can take many forms. It might be a mobile application, web application, computer game, game for mobile devices, tools, libraries, or visualizations that address one of the four challenges. All solutions included both concept and a working prototype.



POLAND

HACK FOR HEALTH



TEAM POLAND

NCD Management for Healthy Living

Challenge

Allow for self-diagnosis, treatment, and greater disease awareness in those individuals with non-communicable illnesses, such as diabetes and heart disease.

Solution

A two-sided application to analyze eating patterns for better health. The mobile patient app acquires basic medical data, physical activities, allergies, environmental conditions, and more, which gives context to the user's eating behaviors and includes a product scanner for supermarket use to evaluate purchases. The doctor side web service monitors the patient data and makes recommendations for food intake and physical activity for best health. The data will allow for the use machine learning and a classification algorithm to improve the system with less human input.



**Paulina
Wojtyczcka**
POLAND



**Robert
Kuna**
POLAND



**Fabian
Kapuscik**
POLAND



**Jakub
Król**
POLAND



**Aleksander
Surman**
POLAND



**Jakub
Gawlas**
POLAND



**Adam
Merk**
POLAND



TUNISIA

HACK FOR HEALTH



TEAM TUNISIA

Urban Environmental Quality

Challenge

Air pollution is increasing exponentially and serves as a major contributing factor to a wide-variety of global health issues.

Solution

An application that gathers air pollution data using sensors and feeds it into an algorithm that provides relevant information for government and citizens to incite healthy practices. Citizens participate in change by installing sensors at their homes to provide more accurate data. This allows them to draw benefits in return.



Meher Bnouni
TUNISIA



Khalil Ben Sassi
TUNISIA



Ichrak Mars
TUNISIA



Seif El Hajjem
TUNISIA





NYOURTRITION

HACK FOR HEALTH



TEAM NYOUTRITION

Promoting Healthy Behavior

Challenge

Addressing issues in maintaining healthy nutrition habits and a good diet are of immense importance worldwide.

Solution

A platform that invites informed users to take responsibility of their own health and nutrition in the context of a moderated collaborative, community platform. With nYOUtrition, individuals are empowered to transform their health with people just like them and with support from experts.



Nicole Kogan
USA



Kaveh Bazargan
Iran



Shantam Maheshwari
India





UAE HACK FOR HEALTH



TEAM UAE

Non-Communicable Disease

Challenge

Non-communicable disease (NCD) is responsible for 68% of deaths. Targeting it has a high potential to decrease health problems.

Solution

An application that mines data from social networks, APIs and Google trends, then visualizes the data for governments and decision makers.

Availability of the information is limited and the solution pinpoints the affected areas so efforts can be focused on those areas, and hence the efficiency of campaigns (and health outcomes) are maximized.



Anfal Attai
UAE



Khalid AlAwar
UAE



Najla AlAnsari
UAE



NORWAY

HACK FOR HEALTH



TEAM NORWAY

SAGA: Bridging the Gap Between Folklore and Fact

Challenge

Improve citizen awareness of healthy behaviors and promote healthy habits, such as increased physical exercise, proper nutrition and stress management.

Solution

An interactive kid-friendly media (ebooks, games, cartoons) presented on a website which incorporates local folklore with a factual twist to help teach children healthier eating habits.



Dendembo Diallo



Anne Ingeltjorn



Daria Krivonos



AWARDS



ITU Acceleration Awards

Team Norway | dSAGA: Bridging the Gap Between Folklore and Fact

 **WSIS** **FORUM** **12-16 JUNE 2017**
Geneva | Switzerland

AWARDS



ITU Acceleration Awards

Team Poland | NCD Management for Healthy Living

WSIS
FORUM
12-16
JUNE 2017
Geneva | Switzerland

AWARDS



IEEE "Excellence in Ethics Award"

Team Tunisia | Urban Environmental Quality

 **WSIS** **12-16 JUNE 2017**
Geneva | Switzerland



World Summit
on the Information Society
Turning targets into action
Geneva 2003 | Tunis 2005 | New York 2015



#ICT4SDG





Photographs

ITU Pictures | Flickr: <https://www.flickr.com/photos/itupictures/albums/72157681902576084>

News

ITU News: <http://news.itu.int/urban-health-solutions-wsis-hack-for-health/>

Podcast

ITU Podcast: <https://soundcloud.com/ituproduction/wsis-hack-for-health-podcast>

WSIS Forum 2018 Hackathon

Topic : Hack Against Hunger.

Organizers: ITU, FAO and IEEE.

Participation: We invite all interested participants to contact us at wsis-info@itu.int

