Mastering the Secrets of the Wikimedia Research and Development Ecosystem in Africa

WIKIMANIA SINGAPORE

Houcemeddine Turki
User:Csisc
This work is a part of the “Adapting Wikidata to support clinical practice using Data Science, Semantic Web and Machine Learning” Project, funded by the Wikimedia Research Fund of Wikimedia Foundation.
This is an entertainment session

This should be fun

- A quiz of eight questions
- Letting the audience guess (3 minutes)
- Providing the answer
- Explaining the answer (2 minutes)
Question 1

How many African countries are involved in Wikimedia Research and Development?

10
20
30
Question 1

How many African countries are involved in Wikimedia Research and Development?

10

20

30
Question 2

When has the African Wikimedia Technical Community in Ghana been founded?

2016
2017
2018
Question 2

When has the African Wikimedia Technical Community in Ghana been founded?

- 2016
- 2017
- 2018
AWMT Community. Growing technical contributors for tomorrow

AWMT Community formerly known as Africa Wikimedia Developers Project (AWMD) initially started as a project that sought to start a developer community on the African continent and to encourage more developers to volunteer for the Wikimedia Foundation. Over the years, the project has broadened its scope and made opportunities for other technical contributions to be a part of the project hence the change of name from Africa Wikimedia Developers Project (AWMD) to Africa Wikimedia Technical Community (AWMT). Our mission is to create an enabling ecosystem for developers who are willing to learn and build new skills in the open space through volunteering as technical contributions for the Wikimedia Foundation.

Felix Narwey — Project Management
Perside Rosalie — Community Engagement/Technical Advice
Can you name five active Wikimedia Developers from Africa?
Active Developers

Mahuton Possoupe
User:MPossoupe (WMF)
Benin

Alangi Derick
User:X-Savitar
Cameroon

Egbe Eugene Agbor
User:Eugene233
Cameroon

Sam Oyeyele
User:Jamie Tubers
Nigeria

Abel Lifaefi Mbula
User:BamLifa
DR Congo
Where is the most productive research institutions working on Wikimedia Projects?

- Tunisia
- Egypt
- South Africa
Question 4

Where is the most productive research institutions working on Wikimedia Projects?

- Tunisia
- Egypt
- South Africa
Data Engineering and Semantics
Research Unit

University of Sfax, Tunisia

Informally working since 2011
Recognized as a nationwide research unit in 2012
Robust Infrastructure: Headquarters and Data Center
29 research publications as per Scopus

URL
YouTube

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Question 5

Do African countries integrate the forefront of Wikimedia Research and Development?

Yes

No
Question 5

Do African countries integrate the forefront of Wikimedia Research and Development?

Yes

No
Not really...

- Recent integration of African countries
- Dependency on International Collaboration
- Mainly occurred thanks to collaboration with BRICS countries
- Poor productivity of African countries.

What is the main target Wikimedia Project for research and development efforts?

- Commons
- Wikidata
- Wikipedia
- Wiktionary
Question 6

What is the main target Wikimedia Project for research and development efforts?

Commons
Wikidata
Wikipedia
Wiktionary
Wikipedia...

- +2.9k GitHub repositories
- +12,1k scholarly publications according to Scopus
- Tech giants like Google and IBM develop Wikipedia tools
- A huge interest from research institutions all over the world
- A very small productivity of Wikimedia volunteers


However, Wikidata...

- +36.2k GitHub repositories
- +945 scholarly publications according to Scopus
- Easier to parse and reuse due to its structured format in the form of RDF triples
- Better engagement of Wikimedia volunteers and affiliates in research and development related to Wikidata


Question 7

What is the most efficient governance of non-profit Wikimedia research and development communities in Africa?

- Top-down governance (Scientific society)
- Self-organized distributed governance (Grassroot)
- Affiliate governance (Wikimedia affiliate)
Question 7

What is the most efficient governance of non-profit Wikimedia research and development communities in Africa?

- **Top-down governance**
  (Scientific society)

- **Self-organized distributed governance**
  (Grassroot)

- **Affiliate governance**
  (Wikimedia affiliate)
Masakhane
The African Grassroots Community for NLP research

Wikimedia Foundation Research Award of the Year

The Wikimedia Foundation Research team established the Wikimedia Foundation Research Award of the Year in 2021 to recognize recent research that has the potential to have significant impact on the Wikimedia projects or research in this space.

Participatory Research for Low-resourced Machine Translation: A Case Study in African Languages (paper) and the Masakhane Community (learn more)

This paper and the Masakhane community have attempted to fundamentally change how we approach the challenge of “low-resourced languages” in Africa. The research describes a novel approach for participatory research around machine translation for African languages. The authors show how this approach can overcome the challenges these languages face to join the Web and some of the technologies other languages benefit from today.


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The African Grassroots Community for NLP research

Question 8

Is the African Artificial Intelligence community interested in Wikimedia research and development?

Yes

No
Question 8

Is the African Artificial Intelligence community interested in Wikimedia research and development?

Yes

No
Nope

Minor interest in using Wikimedia Projects for training machine learning applications

- Fancy techniques like Artificial Neural Networks
- Few-shot learning rather than knowledge-based systems
- Using benchmarks rather than open resources requiring pre-processing
- Interest in Image Analysis and Internet of Things rather than Semantic Analysis

Any question

Houcemeddine Turki
User:Csisc

E-mail: turkiabdellwaheb@hotmail.fr
Phone: +21629499418
Twitter: @Csisc1994
LinkedIn: Houcemeddine Turki