

NTeALan - AI/NLP/NLU Platforms For Sharing and Leveraging African Language Resources For Education In Africa

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NEW TECHNOLOGIES FOR AFRICAIN LANGUAGES

Language Teaching | Collaborative Dictionary |
Scientific journal | TAL tools for African languages

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THE NTEALAN PROJECT

NTeALan (New Technologies for African Languages) is an Association that works for the implementation of intelligent technological tools for the promotion, development and teaching of African national languages.

MAIN GOAL

Digitize, safeguard and promote African national languages through digital tools and Artificial Intelligence to build a new generation of young Africans aware of the challenges of appropriating the languages and cultures of the continent.

OUR STRATEGIES

- Create a community of professionals specialized in sociolinguistic and technological issues (NLP / NLU / IA) for Africa
- Create a community of volunteer contributors around collaborative platforms for building common language resources
- Systematically equip all the African national languages by language family and encourage their use by young people
- Collaboratively use created resources to set up an autonomous language teaching platform
- Systematically equip all the African national languages according to language families and encourage their use by young people

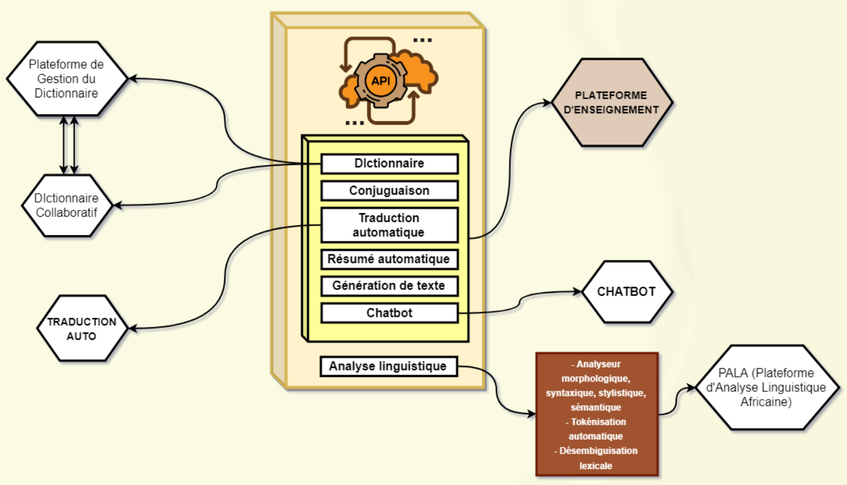
PROBLEMS TO SOLVE

- No African scientific community dedicated to technological issues related to the written and oral transmission of knowledge in African languages
- Few standardized African languages on a vast ensemble
- Few teaching and literacy tools in African languages on the internet
- NLP/NLU/IA researches are not yet enough developed on the continent for African languages

THE MAIN'S NTEALAN PROJECTS

- Automated learning management system based on virtual assistant
- The conversational agents platform [**NTeABot**],
- The collaborative dictionaries platform for African national languages [***https://ntealan.net/dictionnaires***],
- REST and Websocket APIs for sharing language resources [**https://apis.ntealan.net**],
- The platform for the management of lexical and terminological resources in African languages [**https://ntealan.net/dictionaries-platform**]
- The platform dictionary illustration [***http://up-files.ntealan.org/koken***],
- The tool for digitizing documents in African languages
- The dictionaries annotation platform (component of the scanning tool) [***http://dico-edit.ntealan.net***],
- Scientific research activities in Natural Language Processing (NLP) and Natural Language Understanding (NLU) for African languages,
- The management of the NTeALan center at Makepe (Douala) and many others internally.

AFRICAN LANGUAGES RESSOURCES AND TOOLS



Creation of APIs for NLP/NLU/IA applications of :

- Collaborative Dictionary
- Automatic Conjugation
- Automatic Translation
- Auto summary
- Text Generation
- Chatbot
- Opinion Mining
- Language Analysis

Realization of teaching platforms, Chatbot, Dictionaries, automatic translation, etc.

NTEALAN IN FIGURES

2 years of existence (2017-2019)

+15 members worldwide

3 institutional and private partners

3 the tooled african languages

+5 students trained in computer linguistics

5 open source and collaborative resources and tools

1 equipped research and development center

OUR ACHIEVEMENTS

NTEABOT

NTeABot is a conversational agent development platform that comprehensively addresses all types of questions with an African linguistic and cultural particularity.

COLLABORATIVE DICTIONARY OF AFRICAN LANGUAGES

The Collaborative Dictionary of African Languages and Cultures is an open-source project that will enable African language development and helps actors to use digital and accessible linguistic and cultural resources

ANNOTATION PLATFORM FOR DICTIONARIES

Platform for digitizing dictionaries and books in African languages.

THE APIS

- API for Lexical resource management
- API's Conversational Agents
- API creation for Language Teaching
- API's for African languages processing

CULTURAL ILLUSTRATIONS PLATFORM

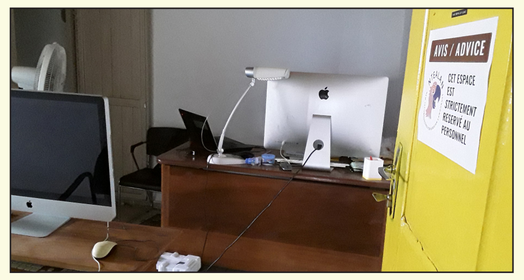
This platform gathers all illustrations together, used in the collaborative dictionary and particularly the other NTeALan's platforms

LINGUISTIC MAP OF AFRICAN LANGUAGES

This interactive online map represents all the linguistic layers that can be found in Africa.

RESEARCH AND DEVELOPMENT CENTER





NEXT PROJECTS

- Autonomous platform for teaching languages and cultures
- Conversational Agent Assistant for Language Teaching
- Virtual cultural museum for the safeguarding of the African socio-cultural inheritance

PARTENERS

MINPOSTEL

Fractal Systems

INSTITUTIONAL SUPPORT

- ***Ministry of Posts and Telecommunication of Cameroon***
- ***Ministry of Culture of Cameroon***
- ***Linguistic Department and African Languages of the University of Douala***

OUR TEAMS

Develop software : Daniel BALEBA , Jean-Marc BASSAHAK , Elvis MBONING
Linguists : Prof. Jules ASSOUMOU , Juanita FOPA , Merci Christian BONOG BILAP, Marcel TOMI BANOU
Technical partners : NTOMB David, NTOMB Nicolas, Damien NOUVEL, Théophile KENGNE, Parfait DIMONO, Yves Bertrand DISSAKE ...

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