



I4DEV 2019, NIAMEY July 04th to 10th, 2019

Summit of the AFRICAN UNION, Niamey NIGER 2019

Innovation for development

<http://i4dev.org/uploads/docs/CONCEPT%20NOTE%205.14.5%202014DEV.pdf>

LES ACTEURS



Innovation for Development (I4DEV) est un événement majeur pensé pour fédérer et connecter les acteurs de l'innovation au service du développement. Il vise la mise en lumière et la vulgarisation à l'échelle internationale des innovations africaines pour un développement durable.

I4DEV connecte quatre initiatives majeures de l'innovation en Afrique à travers le forum **SahellInnov** piloté par le **Centre Incubateur des PME au Niger (CIPMEN)**, l'Africa

Science Week piloté par le **Next Einstein Forum (NEF)**, le programme d'envergure Villages Intelligents piloté par l'**Agence Nationale pour la Société de l'Information (ANSI)** et la **Convention des Hubs d'Innovation Africains African Innovation Hub Convention (AIHC)** organisée par **i4Policy**.

L'objectif de **I4Dev** est de favoriser la collaboration entre les start-up, la recherche scientifique et les partenaires au développement pour créer des solutions significatives et durables pour le bien-être des populations.

Le comité permanent de **I4DEV** organisera en continuité, des événements autour de l'innovation pour créer un effet synergique durable nécessaire au développement.

I4DEV ambitionne de devenir le réseau africain par excellence de l'innovation durable à l'échelle mondiale.

INNOVATION FOR DEVELOPMENT

technique » au sens large.

Nos échanges sont constructifs et très complémentaires : d'un côté le conseil et l'assistance technique plutôt sur le matériel et sa mise en œuvre (France) et de l'autre analyse plus poussée au niveau du codage et de l'algorithmie....nous permet d'améliorer l'efficacité du codage utilisé avec une approche plutôt raisonnée grâce aux compétences des enseignants au profil plutôt orienté « communication réseau / langages de programmation en code (C++ et Python / Open Blocks graphique).

Nous nous accordons sur un fil conducteur commun : celui de l'INNOVATION dans notre approche pédagogique ainsi que l'INNOVATION dès le secondaire dans les solutions matérielles employées dans nos projets scientifiques.



La première édition de **I4DEV** se tiendra en marge du sommet de l'Union Africaine du **4 au 10 juillet 2019** à **Niamey - Niger**. L'évènement sera placé sous le **Haut patronage de Son Excellence Monsieur Issoufou MAHAMADOU, Président de la République du Niger**.

Notre Participation au Forum INNOVATION I4DV

@IgoBot au Forum I4Dev

Equipe @IgoBot sous le parrainage de Monsieur Guimba DG ANSI :

- ✓ **Benjamin Raybaud**, professeur de Maths et de Sciences Informatiques au Lycée français La Fontaine de Niamey, Président d'@IgoBot Niger
- ✓ **Ouissem Moussi**, Président de ARRE Tech organisateur de la RoboRAVE Saint Priest, enseignant en Technologie – Académie de Lyon
- ✓ **Frédéric Lucas**, Professeur des Écoles au Lycée français La Fontaine de Niamey, Vice-Président de @IgoBot Niger
- ✓ **Al Kassoum Nabil**, Enseignant Informatique et électronique à L'EMIG / département Physique à FAST Faculté des Sciences & Techniques de L'université Abdou-Moumouni de Niamey
- ✓ **Ibrahim Djibo**, Directeur des Services Informatiques de l'ONECS
- ✓ **Mahamane Awale**, professeur d'informatique à l'IUT de Tahoua
- ✓ **Ismaël Boubacar Abdouramane**, Président @IgoBot Tahoua, étudiant
- ✓ **Sidi Ali** Directeur Adjoint de l'IUT de Tahoua
- ✓ **Romain Vedrenne**, professeur de technologie - Académie de Lyon et membre de ARRE-Tech
- ✓ **Tchamasse Warapisse**, Président des Elèves de l'EAMAC - étudiant en 2ème année d'électronique et informatique – intervenant au club @IgoBot Niamey du LAF
- ✓ un représentant du Ministère de l'Enseignement secondaire

Program of our stay in Niamey

July 6 Arrival in Niamey

7th / 8th of July: Preparation / training with the partners of the stands of the Forum.

- IUT of Tahoua
- Partners of Niamey:
- Students from EAMAC & FAST
- Teachers and students of L'EMIG
- Students of the Youth Coding Club of Lycée La Fontaine
- Winners of the Niger Algorea Contest
- 2 teachers Association ARRETECH

July 9/10: Animation of the stands on the forum

July 11/12: Time spent creating ANSI partnerships, Ministry, IUT etc.

July 12th: Return to France

Why the presence of the association ARRETECH at the Salon of Innovation for Sustainable Development?

- > Contribute to supporting pedagogical and technological innovation in teaching in Niger and to partner clubs and friends (school - college - high school - university - extracurricular club).
- > To train / advise / support the scientific process in the educational projects of our partners.
- > Technical and didactical advice on digital tools and teaching materials (mainly Free Software Open Source - Open Hardware)
- > Support cultural and scientific projects of international cooperation to encourage young people to engage in scientific and technical fields.
(School Exchanges / International Cooperation / Science and Robotics Competitions / Educational Innovations / Technological Innovations)

How can ARRETECH help its partners and friends achieve their goals?

Our approach is divided into 5 points:

1- Through collaborative work with the actors of education on the ground (Niamey - Tahoua)

<https://algotniger.wordpress.com/>

> Strengthen and develop our exchanges and collaborations with officials and staff in charge of education through concrete actions:

- Discovery and participation in the RoboRAVE contest
- Discovery of the INTERNATIONAL RoboRAVE competition events
- links with RoboRAVE Nigeria + RoboRAVE France).
- Scientific Project of International Cooperation: FATE Project (French African Team of Engineer).
- Technology watch and training on didactic materials and teaching materials (programmable micro-controller / sensors / actuators / displays etc.)

*2- By the Technical Support / Participation in the development of Udapted solutions / Technology Watch / Research and Innovation:
Partnership with our local supplier of KUBII educational solutions: <https://www.kubii.fr/>*

- > Providing educational material from the latest technologies available on the market
- > Direct contact between students / teachers and professional developers in order to better meet the specific needs of the target audiences and support innovation in school and science projects.
- > Enable partner teachers to test some products in preview before market availability to the general public
(willing to put our public at the forefront of innovation and contributing to the development of solutions developed for them).

- > Introduce very early in the school projects (from the college) Professional products in a way adapted to make sense of learning and remain in constant cohesion with the requirements of the industrial world and global competitiveness
(range of Sick PRO sensors / Product range developers and schools: MicroComputers Raspberry PI-Books and activity books / Introduction and training in professional programming languages: Python coding and C ++ / Coding), JavaScript)

3- Through the sharing of our experience and our professional contacts in the field of aerial imagery by DRONES + Promote the place of girls in scientific and technical fields by an educational approach and scientific leisure + Inquiry Learning

> In partnership with PARKO'DRONE

(Introduction to piloting by video immersion / Drone programming coding / Practical training in Drone piloting and flight - preparation for drone pilot examinations / Initiation to the BIA diploma Patent of Initiation to Aeronautics - discovery of the trades in connection with the drone: cartography and aerial imagery etc ...)

> Safe scientific activity for the promotion of scientific and technical leisure activities for girls in particular

(make technology accessible to all - 45% female customers)

<https://www.parkodrone.fr/>

- Programming of mini drones Standalone DJI TELLO EDU with Scratch 2.0 in WIFI connection
- Programming synchronized flights (in squadron 2 to 4 drones) in language
- Independent Flight Mission DJI MAVic PRO

4- To give access to professional Professional equipment to support INNOVATION: Partnership with SICK SENSOR INTELLIGENCE Company (Saint-Priest) <https://www.sick.com/fr/fr/>

> discovery of the range of compatible PRO sensors (learning mode etc ...)

> Discovery of SICK dedicated software (100% free and online) + tutorials and datasheets in French and freely available online.

> Professional expertise and technical support for the integration of pro sensors in school and university projects.

> Accompany performance and innovation through the use of high-end materials guaranteed for life (to abstract the multiple technical problems related to the use of the educational material with often limited technical constraints - research the performance)

5- To work in the respect of the development and the autonomy of the local populations / To bring a development aid and a collaboration in a constructive spirit respectful of the world economic stakes and Objectives fixed by the AU

> The equipment will be repaired on site in France by the competent teams - The analysis of the deployment of the machines in the field will be done according to the ANSI guidelines in compliance with the National Computer Charters and under the directives of the Minister Special Delegate Mr. Guimba and his teams.