

Dipper
**„Distributed IoT-
Platforms for Safe
Food Production –
in Education,
Research and
Industry”**

Our Network

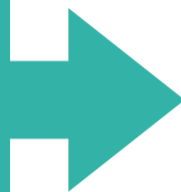
Institution in Germany:
Project responsible:
Cooperation partners in Africa:

Offenburg University
Prof. Dr.-Ing. Axel Sikora
Dr. Eric Tutu Tchao, Kwame Nkrumah University
of Science and Technology (KNUST),
Kumasi, Ghana

Food production / IT-processes / distributed ledger technologies (DLT) / blockchain

Challenges:

- Complete, safe and secure food production chain using distributed ledger technologies (DLT) and industrial blockchain
- Usage of Cyber-Physical Systems (CPS) through the integration of IoT sensors into DLT
- Optimization of DLT solutions



Project Objectives:

- Setup of IoT lab
 - For research
 - For teaching & labs
- Integration into KNUST EE syllabus
- Joint research activities
- Application of R&D topics / applied research



Visit to HS Offenburg Sep. 2021



Dipper lab at KNUST Feb. 2022



IoT training course at KNUST
Feb. 2022

Good practices

- Regular web-meetings
- Joint publications
- Ph.D. seminar

Open questions / looking for experience

- Integration into syllabus
- Hands-on labs
- Application of research
- Integration of further stakeholders
 - Industrial associations
 - Enterprises



Activities

- Four joint Ph.D. students (3*KNUST, 1*HSO)
 - Numerous joint publications
 - Bi-weekly web conferences
 - Research stays
- Faculty exchange
 - Direct discussions
 - Research stays
- First visit to KNUST in Feb 2022
 - Lecture teaching
 - Lab & hands-on training
 - Discussions & meetings