**CV - ERIC TUTU TCHAO**

**1. Academic Degrees earned with Dates**

* PhD Telecommunications Engineering, Kwame Nkrumah University of Science and Technology, Ghana (KNUST), August, 2011 – June, 2015
* BSc Telecommunications Engineering, Kwame Nkrumah University of Science and Technology, Ghana, August, 2006 – June, 2010

**2. University Teaching and Research Experience with Dates**

1. **Academic Ranks held**
2. Kwame Nkrumah University of Science and Technology (KNUST)

August 2020 – Present: **Senior Lecturer**

1. Kwame Nkrumah University of Science and Technology (KNUST)

September 2015 – July 2020: **Lecturer**

1. **Research Position**
2. Distributed IoT Platforms, Privacy and Edge-Intelligence Research (DIPPER) Lab (dipperlab.knust.edu.gh) Jan 2021-Present: **Scientific Director**
3. Responsible Artificial Intelligence Lab (rail.knust.edu.gh) – Nov 2021 – Present: **Research Theme Lead**

**3. Details of Selected Research and Projects Undertaken**

1. Development of an Open Toolbox for Safe Food Monitoring (DOTbox) project funded by the Future Africa Research Leadership (FAR-LeaF), Carnegie grant – 2022 to 2023 -$32,000
2. Adoption of digital tools by African farmers for sustainable intensification of cropping systems,DFG, German Research Foundation - € 19,544.00
3. Digital Diagnostics for Smarter Healthcare in Africa (August 2020 – June 2021) - A £149,967.00 network grant by the UK Research and Innovation’s Digital Innovation for Development in Africa (DIDA) Initiative
4. Joint DAAD-BMBF R&D Grant - Distributed IoT-Platforms for Safe Food Production – in Education, Research and Industry (Dipper) 2021 to 2024 - 718,915.87 Euros
5. Regional Artificial Intelligence Lab (RAIL-KNUST)- Joint IDRC-GIZ Grant of $1,013,167.00 Canadian Dollars
6. African Agriculture Knowledge Transfer Partnership Grant with SESI Technologies, UKRI – 2023 -2024 – £248,162.00
7. Student and Staff Mobility Grant with Scuola Superiore Sant'Anna, Italy, Erasmus+ Grant – August 2023 – July 2026 – €1.6 Million
8. **Selected Publications arising out of research**
9. **E. T. Tchao,** E. M. Gyabeng, A. Tang, J. B. N. Benyin, E. Keelson and J. J. Kponyo, "An Open and Fully Decentralised Platform for Safe Food Traceability," 2022 International Conference on Computational Science and Computational Intelligence (CSCI), Las Vegas, NV, USA, 2022, pp. 487-493, doi: 10.1109/CSCI58124.2022.00092.
10. Seth Djanie Kotey, **Eric Tutu Tchao**, Abdul-Rahman Ahmed, Axel Sikora, Andrew Selasi Agbemenu, Eliel Keelson, Dominik Welte and Eliel Keelson, "*Blockchain interoperability: the state of heterogenous blockchain-to-blockchain communication*", IET Communications. 00, 1– 24 (March 2023). https://doi.org/10.1049/cmu2.12594
11. Nana Kwadwo Akrasi-Mensah, **Eric Tutu Tchao**, Henry Nunoo-Mensah, Andrew Selasi Agbemenu, Abdul-Rahman Ahmed, Axel Sikora, Dominik Welte and Eliel Keelson, "*An Overview on Technologies for Improving Storage Efficiency in Blockchain-Based IIoT Applications*" Electronics, 11(16):2513. August 2022, <https://doi.org/10.3390/electronics11162513>.
12. Nana Kwadwo Akrasi-Mensah, Andrew Selasi Agbemenu, Henry Nunoo-Mensah, **Eric Tutu Tchao**, Abdul-Rahman Ahmed, Eliel Keelson, Axel Sikora, Dominik Welte and Jerry John Kponyo" *An Adaptive Storage Optimization Scheme for Blockchain-IIoT Applications using Deep Reinforcement Learning*", in IEEE Access, vol. 11, pp. 1372-1385, 2023, doi: 10.1109/ACCESS.2022.3233474.