

RESEARCH GRANTS

- **African Bird Club Grant** : *Testing the feasibility of an acoustic monitoring system for monitoring trends in species richness of forest birds in an important bird area, GBP 1,916.*
- **ESRC Grant** : Co-convenor on the project “Digital Development: Leveraging Data Science and Digital Participatory Practice for Development Impact”, 2017-2018. PI - Prof. Dorothea Kleine, University of Sheffield
- **Kenya Education Network Mini Grant** : *Re-imagining Electrical Engineering Education Using The Raspberry Pi, USD 10,000.*

TEACHING

- **Dedan Kimathi University of Technology**: Digital Signal Processing, Signals and Systems, Artificial Intelligence, Circuit Theory
- **Drexel**: Digital Logic Design, Probability and Random Variables, Fundamentals of Deterministic and Statistical Digital Signal Processing

RECENT PUBLICATIONS

1. D. M. Memeu, S. A. Merenga, and C. wa Maina, “Photoacoustic Sensing in Tissue Using Optical Scattering Modulation,” In *IEEE Africon 2017*, Cape Town, South Africa.
2. C. wa Maina, “IoT at the Grassroots - Exploring the Use of Sensors for Livestock Monitoring,” In *IST-Africa 2017*, Windhoek, Namibia.
3. C. wa Maina, D. Muchiri, and P. Njoroge “A Bioacoustic Record of a Conservancy in the Mount Kenya Ecosystem”. *Biodiversity Data Journal*, (4), 2016.
4. C. wa Maina, “Cost Effective Acoustic Monitoring of Bird Species,” In *Interspeech 2016*, San Francisco, USA.
5. C. wa Maina, A. Muhia, and J. Opondo “A Low Cost Laboratory for Enhanced Electrical Engineering Education,” In *IST-Africa 2016*, Durban, South Africa.
6. C. wa Maina, “Audio Diarization for Biodiversity Monitoring,” In *IEEE Africon 2015*, Addis Ababa, Ethiopia.
7. C. wa Maina, “Bioacoustic Approaches to Biodiversity Monitoring and Conservation in Kenya,” In *IST-Africa 2015*, Lilongwe, Malawi.
8. C. wa Maina, A. Honkela, F. Matarese, K. Grote, H. G. Stunnenberg, G. Reid, N. D. Lawrence, and M. Rattray, “Inference of RNA Polymerase II Transcription Dynamics from Chromatin Immunoprecipitation Time Course Data,” *PLoS Comput Biol* 10(5): e1003598. doi:10.1371/journal.pcbi.1003598 2014 arXiv:1303.4926 [q-bio.QM]
9. Ciira wa Maina and John MacLaren Walsh. “Joint Speech Enhancement and Speaker Identification Using Approximate Bayesian Inference,” *IEEE Transactions on Audio, Speech, and Language Processing*, vol. 19, no. 6, pp. 5491 – 5510, Aug. 2011.

TECHNICAL SKILLS

Programming: Python, C, C++