

DR. CONSOLATA GAKII MWIRICHIA

Name: Consolata Gakii Mwirichia

Title/Qualification: PhD.

Position: Lecturer

Department: Computing and Information Technology

School: School of Pure and Applied Sciences

Area of Specialization: Machine Learning and Big Data Analytics

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Short Biography

Dr. Consolata Gakii holds a PhD, an MSC, and a Bachelor of Science in Information Technology from Jomo Kenyatta University of Agriculture and Technology, Kenya. Consolata is a machine learning and big data analytics expert. She is driven by the opportunity to make a significant impact in an increasingly data-driven world by applying skills and expertise to tackle complex problems and extract actionable insights from one health related data. Presently, she is actively engaged in projects spanning Embu and Murang'a counties, employing artificial intelligence to raise awareness about HIV/AIDS, exemplifying her commitment to harnessing technology for public health initiatives.

Research Interests.

- Big data analytics
- Machine learning
- Bioinformatics
- Computational biology

Publications in Journals

1. Mukoya, E., Rimiru, R., Kimwele, M., **Gakii, C.**, & Mugambi, G. (2023). Accelerating deep learning inference via layer truncation and transfer learning for fingerprint classification. *Concurrency and Computation: Practice and Experience*, 35(8), e7619. <http://dx.doi.org/10.1002/cpe.7619>
2. Bwana, B. K., Mireji, P. O., Obiero, G. F., **Gakii, C.**, Akoth, M. O., Mugweru, J. N., ... & Hassanali, A. (2022). Annotations of novel antennae-expressed genes in male *Glossina morsitans morsitans* tsetse flies. *Plos one*, 17(8), e0273543. <https://doi.org/10.1371/journal.pone.0273543>

3. **Gakii, C.,** Mireji, P. O., & Rimiru, R. (2022). Graph Based Feature Selection for Reduction of Dimensionality in Next-Generation RNA Sequencing Datasets. *Algorithms*, 15(1), 21.<http://dx.doi.org/10.3390/a15010021>
4. Murimi, M. M., Margaret, K. I. N. Y. U. A., Boaz, T. O. O., & **Gakii, C. (2021)**. Maize Leaf Disease Detection using Convolutional Neural Networks. *Journal of Applied Computer Science & Mathematics*, 15(1), 15-20.<http://dx.doi.org/10.4316/JACSM.202101002>
5. **Gakii, C., & Rimiru, R. (2021)**. Identification of cancer-related genes using feature selection and association rule mining. *Informatics in Medicine Unlocked*, 24, 100595.<http://dx.doi.org/10.1016/j.imu.2021.100595>
6. **Gakii, C.,** Bwana, B. K., Mugambi, G. G., Mukoya, E., Mireji, P. O., & Rimiru, R. (2021). In silico-driven analysis of the *Glossina morsitans morsitans* antennae transcriptome in response to repellent or attractant compounds. *PeerJ*, 9, e11691.<http://dx.doi.org/10.7717/peerj.11691>
7. **Gakii, C., & Jepkoech, J.(2019)**” A Classification Model For Water Quality Analysis Using Decision Tree” *European Journal of Computer Science and Information Technology*, Volume 7, NO.3, pp.1-8, June 2019. <http://dx.doi.org/10.24425/jwld.2023.147223>
8. **Gakii, C., Mukiri, V. F., & Murimi, M. (2018)** **Information Technology in Government Services Delivery: A Case Study of Huduma Center Kenya.** *International Journal of Scientific & Technology Research*, 7(12), 67-69. <http://repository.embuni.ac.ke/bitstream/handle/embuni/3739/>
9. **Consolata, M.,** Mwangi, W., & George, O. (2016). Telecommuting model for small and medium enterprises (Smes) in Kenya. *European Journal of Computer Science and Information Technology*, 4(4), 13-19. <http://www.eajournals.org/wp-content/uploads/Telecommuting-Model-for-Small-and-Medium-Enterprises-SMES-In-Kenya.pdf>
10. **Consolata, M.,** Mwangi, W., & George, O. (2016). Assessing the Effectiveness of an Adaptive Structuration Theory Based Telecommuting Model using Web Analytics. *International Journal of Information and Communication Technology Research*, 6(8).<https://eajournals.org/ejcsit/tag/adaptive-structuration-theory/>