# Eric Nyambiriga Araka

# **Personal Profile**

### **Personal Details**

Name:	Eric Nyambiriga Araka
Title/Qualification:	PhD, Ongoing
Department:	Computing & Information Technology
Designation:	Tutorial Fellow
Email:	araka.eric@ku.ac.ke
Contact Address:	10680 Nairobi, 00400

#### Area of Specialization:

- Artificial Intelligence
- Machine Learning
- Distributed Computing Technologies

#### **Research Interests:**

- Artificial Intelligence in Education
- Machine Learning
- Educational Data Mining & Learning Analytics
- Data Science & Analytics
- Technology Enhanced Learning

#### Google Scholar: https://scholar.google.com/citations?user=ag-Bb08AAAAJ&hl=en ORCID ID: https://orcid.org/0000-0001-9242-7471

### Academic Qualifications

#### \* 2019 to Present: KENYATTA UNIVERSITY

Doctor of Philosophy (PhD) in Computer Science Thesis Title: An Educational Data Mining Model for Promoting Self-Regulated Learning on Learning Management Systems

### ✤ 2013 – 2015: UNIVERSITY OF NAIROBI

Master of Science in Distributed Computing Technology

Thesis title: An SOA Framework for Web-based E-learning Systems – A case of Adult Learners

### 2008 – 2012: KENYATTA UNIVERSITY

Bachelor of Science in Computer Science (First Class Honors)

# 2003 – 2006: MOI MINARIET SECONDARY SCHOOL

Kenya Certificate of Secondary Education (KCSE) Grade A- (79 Points)

2003 – 2006: RIAMICHOKI PRIMARY SCHOOL



Kenya Certificate of Primary Education (KCPE) Marks 341 out of 500

### **Professional Certifications**

- May 20-24, 2019: The IBM Academic Certificate for Artificial Intelligence Analyst 2019 Mastery Award
- March 11-15, 2019: The IBM Academic Certificate for Big Data Engineer v2 Mastery Award for Educators (2018)
- May June 2011: Kenyatta University Mobile Application Development (Certificate by Google Kenya)

### **Employment History**

- 2021 April To date
- 2016 October 2021 March
- ✤ 2012 May 2016 September
- 2013 May 2016 August
- 2013 June 2013 December
- 2007 April 2008 January

Tutorial Fellow, Kenyatta University

Tutorial Fellow, Technical University of Kenya

ICT Manager, Express Communications Ltd

- Associate Faculty, Mount Kenya University
- Research Assistant, COMESA
- Equity (Wings to Fly Program)

### Achievements/Research Awards

- Awarded Postgraduate Research Allowance under the National Research Fund (NRF) 2016/2017 Multidisciplinary Grant whose Principal Investigator is Dr. Elizaphan Muuro Maina (Kenyatta University) under the multidisciplinary-multiinstitutional category involving Kenyatta University, University of Nairobi and The Cooperative University of Kenya
- Awarded a German Academic Exchange Service (DAAD) scholarship to pursue Masters at the University of Nairobi, Kenya (2013-2015)

# **Publications**

### **Referred Journals**

- Araka, E., Maina, E., Gitonga, R., Oboko, R., Kihoro, J. (2021). University Students' Perception on the Usefulness of Learning Management System Features in Promoting Self-Regulated Learning in Online Learning. *International Journal of Education and Development using ICT*. Vol. 17, No. 1. <u>http://ijedict.dec.uwi.edu/viewarticle.php?id=2850</u>
- Araka, E., Maina, E., Gitonga, R., Oboko, R. (2020). Research trends in measurement and intervention tools for self-regulated learning for e-learning environments systematic review (2008–2018). *Research and Practice in Technology Enhanced Learning*. 15, 6. <u>https://doi.org/10.1186/s41039-020-00129-5</u>
- 3. Araka, E., & Muchemi, L. (2017). An SOA Framework for Web-based E-learning Systems-A case of Adult Learners. International Journal of Computer Applications Technology and Research (Vol. 6 Issue 8). DOI: 10.7753/IJCATR0608.1003

### Books and Books Chapters

 Araka, E., Oboko, R., Maina, E., Gitonga, R. (2021). A Conceptual Educational Data Mining Model for Supporting Self-Regulated Learning in Online Learning Environments. *Handbook of Research on Equity in Computer Science in P-16 Education.* pp 278-292. IGI Global. <u>https://doi.org/10.4018/978-1-7998-4739-7.ch016</u>

### Conference/Workshops/Seminar Papers

### **Conference Papers**

 Araka, E., Maina, E., Gitonga, R., Oboko, R. (2019). A Conceptual Model for Measuring and Supporting Self-Regulated Learning using Educational Data Mining on Learning Management Systems. 2019 IST-Africa Week Conference, Nairobi, Kenya, 2019. IEEE, pp. 1-11. <u>https://ieeexplore.ieee.org/document/8764852</u>

Workshops Papers

None

Seminar Papers

None

### Student Co-authored Publications

None

**Other Publications** 

None

### **Funded Projects**

- National Research Fund (NRF) 2016/2017 Multidisciplinary Grant. Principal Investigator Dr. Elizaphan Muuro Maina (Kenyatta University) under the multidisciplinary-multi-institutional category involving Kenyatta University, University of Nairobi and The Cooperative University of Kenya.
  - Project Name: Enhancing e-learning using Artificial Intelligence Techniques; Subproject: Enhancing e-learning using Educational Data Mining techniques
- German Academic Exchange Service (DAAD) scholarship to pursue Masters at the University of Nairobi, Kenya (2013-2015)

# Conferenced/Workshops/Seminars Attended

### **Conferences Attended**

 Araka, E., Maina, E., Gitonga, R., Oboko, R. (2019). A Conceptual Model for Measuring and Supporting Self-Regulated Learning using Educational Data Mining on Learning Management Systems. 2019 IST-Africa Week Conference, Nairobi, Kenya, 2019. IEEE, pp. 1-11. <u>https://ieeexplore.ieee.org/document/8764852</u>

#### Workshops Attended

 DAAD in partnership with Information Training & Outreach Centre for Africa (ITOCA) Electronic Resources Training Workshop for DAAD Scholars, August 2014

#### Seminars Attended

Kenyatta University's Growing Leadership Training on "Transformational Leadership"

### Supervision of Postgraduate Students

### Masters

None

### Ph. D

None

# Professional/ Consultancy (Editor/ Peer review in journals, Networks/ Collaborations, External Examiner, Patents)

- Peer Reviewer in The International Review of Research in Open and Distributed Learning Journal, 2020
- Peer Reviewer in Journal of Language and Education, 2020

# Community Service and Other Engagements

Church Elder, Kenyatta University Seventh-Day Adventist Church

# Affiliation of Professional Bodies

DAAD Scholars Association

# National and International awards and Recognitions

None

# Administrative Positions Held

# Recognized university administrative positions

None

# Other administrative positions Held

None