PROFILE FOR IYABOSOLA BUSOLA ORONTI

i. **Brief Biography:**

Iyabosola Busola Oronti was born in Ikire, Nigeria. She obtained her Bachelor of Science (B.Sc.) degree in Electrical and Electronics Engineering at the University of Ibadan, Nigeria, majoring in Electronics. She later proceeded for her master's degree, also in the field of Electrical and Electronics Engineering (Communications option), at the University of Lagos, Nigeria. Prior to her resumption at The University of Warwick for her PhD program, she had worked as a Laboratory Scientist, and had served as the Head of all laboratories in the Department of Electrical and Electronics Engineering Federal University of Agriculture Abeokuta, a position she held for close to twelve years. She subsequently crossed over to the Department of Mechatronics Engineering as a lecturer in the same University in 2017. She is a Registered Engineer with the Council for the Regulation of Engineering in Nigeria (COREN), and had served in the Executive Committee of The Nigerian Society of Engineers (NSE), and the Association of Professional Women Engineers of Nigeria (APWEN), where she held several sensitive positions. At the international level, she is also a member of the Institute of Electrical and Electronics Engineering (IEEE), the Organization for Women in Science for the Developing World (OWSD), etc. She has worked severally outside of the University environment as a System Support Engineer with an Internet Service Provider (ISP), an IT Instructor in a non-governmental organization, as well as a Line Manager in a packaging company. Her current research interests include the development of medical devices for low- and middle-income countries (LMIC), applications of the Internet of Things (IoT) in Biomedical Engineering, and Artificial Intelligence and Machine Learning in Healthcare.

ii. **Passport-sized Photograph:**

iii. **Personal Information:**

Name in full:	-	ORONTI, Iyabosola Busola
Date of Birth:	-	April 08, 1973
Sex:	-	Female

iv. **Department:** Mechatronics Engineering
v. **Email Address:** orontiib@funaab.edu.ng
vi. **Phone Number:** 08138067579
vii. **Rank:**
viii. **Designation:** Lecturer I
ix. **ResearchGate Address:** https://www.researchgate.net/profile/Iyabosola-Oronti
x. **LinkedIn Address:** https://www.linkedin.com/in/busola-oronti-86b75811/
xi. **Google Scholar profile:** https://scholar.google.com/citations?user=rv-GlLIAAAAJ&hl=en&oi=ao
xii. **ORCID Number:** 0000-0001-5324-6408
xiii. **Qualifications:**

Academic Qualifications with Dates

a. Master of Science (M.Sc.) (2011)

b. Bachelor of Science (B.Sc.) (1998)
c. National Diploma (ND) (1992)
d. West African School Certificate (WASC) (1988)

Professional Qualifications with dates

a. Associate Fellowship of the higher education academy (HEA), UK. [Recog. ref. PR249120] (Aug. 2022)
b. Registered Engineer (R. Engr.), Council for the Regulation of Engineering in Nigeria (COREN) [Reg. No. – 21,543] (2011)

xiv. Membership of Professional Bodies:

a. Member, IEEE Women in Engineering (WIE) (2021)
b. Member, IEEE Engineering in Medicine and Biology Society (EMBS)   (2021)
c. Corporate Member, The Nigerian Institution of Electrical and Electronics Engineers (MNIEEE) [Membership No.: 02722] (2017)
d. Member, IEEE Signal Processing Society (SPS) (2014)
e. Member, Institute of Electrical and Electronics Engineering (IEEE). [Membership No.: 92981646] (2014).
f. Member, Organization for Women in Science for the Developing World (OWSDW) [Member ID: 4847] (2013)
g. Member, Association of Professional Women Engineers of Nigeria (APWEN) [Member ID: 4847] (2009)
h. Corporate Member (MNSE), Nigerian Society of Engineers (NSE) [Reg. No. - 22028]   (2009)

xv. Awards Received:

a. Winner of the university-wide Warwick Awards for Public and Community Engagement (WAPCE) in the PGR category (March 2023)
b. The Laura Bassi Editorial Assistance Scholarship Award for junior academics. (Winter 2019)
c. Award of The Nigerian Government Tertiary Education Trust Fund (TETFund) Scholarship Scheme for doctoral training and development for university teaching staff (2018)
d. 'Award of Meritorious Service as two-time General Secretary of The Nigerian Society of Engineers, Abeokuta Branch, Ogun State, Nigeria (2017-2018)
e. 'Alternate Candidate Award' from the TechWomen Fellowship Program, USA (2017)
f. 'Service Award' for outstanding and dedicated service as Treasurer of The Nigerian Society of Engineers, Abeokuta Branch, Nigeria.

xvi. Research Conducted:

Previous Research

a. Design and Construction of a 24-Hour Digital Table Clock (Unpublished Undergraduate thesis), 1998
b. Design and Development of an EPROM-Based Heartbeat Monitor (Master's Mini Project), March, 2011
c. Face Recognition using PCA and Artificial Neural Network (Master's Thesis), June, 2011

Current Research

Finishing up on her PhD research titled: 'Optimised Diagnosis and Management of Non-communicable Diseases for Global Health Using Data Analytics and Artificial Intelligence Methods'.

xvii. Conferences Attended:

   a. Oronti, I. B., Goodman, T., Li, Min Susan, Tomczak, M., Hockman, J., Witek, M., Wing, A., Di Luca, M., and Elliott, M. T., "Annotation Variance Analysis for Optimal Feedback Correction", 19th Rhythm Perception and Production Workshop (RPPW), 19 – 22 June 2023, Nottingham Trent University, Nottingham, UK.

   b. Oronti, I. B., Castaldo, R., Haleem, M. S., Goretti, F., Marzullo, A., Landaza, E., and Pecchia, L., "An Optimised Python Tool for Analysing Time and Frequency Domain Features of HRV Signals", IUPESM World Congress on Medical Physics and Biomedical Engineering (IUPESM WC2022), 12 – 17 June 2022, Sands Expo and Convention Centre, Singapore.

   c. Oronti, B., Amusan, K. and Orimolade, F. (2019): Development of IoT-Based Patient Health Monitoring and Management System. Proceedings III International Clinical Engineering and Health Technology Management Congress, Rome – Italy, Global Clinical Engineering Journal, Special Issue 2, David, Y. (Eds.), 113. Published by Longhorn Surgical Consulting LLC.

   d. Oronti, I. B. and Pecchia L. (2019): Hypertension Diagnosis and Management in Africa Using Mobile Phones: A Scoping Review. Proceedings III International Clinical Engineering and Health Technology Management Congress, Rome – Italy, Global Clinical Engineering Journal, Special Issue 2, David, Y. (Eds.), 148. Published by Longhorn Surgical Consulting LLC.

xviii. Publications:

Articles in Peer-reviewed/Learned Journals

   1. **Oronti, I.B.,** Lopez-Perez, L., Piaggio, D. et al. Effects of home telemonitoring using non-invasive versus conventional approaches on patients affected by congestive heart failure: a systematic literature review and meta-analysis. Health Technol. 13, 535–555 (2023). https://doi.org/10.1007/s12553-023-00764-0

   2. Cisuelo O, Stokes K, **Oronti I.B.**, et al. Development of an artificial intelligence system to identify hypoglycaemia via ECG in adults with type 1 diabetes: protocol for data collection under controlled and free-living conditions. BMJ Open 2023;0:e067899. doi:10.1136/ bmjopen-2022-067899.

   3. Goretti F., **Oronti B.**, Milli M., Iadanza E. Deep Learning for Predicting Congestive Heart Failure. Electronics. 2022; 11(23):3996. https://doi.org/10.3390/electronics11233996

   4. **I. B. Oronti**, E. Iadanza and L. Pecchia, "Hypertension Diagnosis and Management in Africa Using Mobile Phones: A Scoping Review," in IEEE Reviews in Biomedical Engineering, 2022, doi: 10.1109/RBME.2022.3186828. https://ieeexplore.ieee.org/document/9809807.

   5. Maccaro A., Piaggio D., **Oronti I. B.**, Vignigbé M., Gbokli A., Hougnihin R., Pecchia L, Social engagement in the fight against COVID-19 in the urban and peri-urban areas of Cotonou (Benin, Sub- Saharan Africa): acceptability of the vaccination and tracking program, Frontiers in Medicine (accepted March 2022) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9203714/ .

   6. Stokes K, **Oronti B**, Cappuccio FP, Pecchia, (2022) Use of technology to prevent, detect, manage and control hypertension in sub-Saharan Africa: a systematic review, BMJ Open 2022;12:e058840. https://doi.org/10.1136/bmjopen-2021-058840

   7. Di Pietro, L., Piaggio, D., **Oronti, I.**, Maccaro, A., Houessouvo, R. C., Medenou, D., De Maria, C., Pecchia, L. & Ahluwalia, A. (2020): A Framework for Assessing Healthcare Facilities in Low-resource Settings: Field Studies in Benin and Uganda. Journal of Medical and Biological Engineering. 40 (4); 526-534, Published by Springer Nature Switzerland. Available online at https://link.springer.com/article/10.1007/s40846-020-00546-3

8. Orimolade Joseph Folorunso, **Oronti Iyabosola Busola** and Olopade Abdullah Oluwatosin, (December 2019), "A Control System for Assessing Commercial Face Recognition Software for Racial Bias". International Journal of Computer Applications (IJCA), Vol. 177, No. 28, pp. 27-33.

Book Chapters

1. Castaldo, R., Haleem, M. S., Stokes K., **Oronti, B.**, Franzese M. and Pecchia, L. (September 2022) Artificial Intelligence for reliable medical technologies in low resource settings. In Ahluwalia, A., De Maria, C., Pecchia, L. and Severi, S. (editors) Biomedical Engineering for Sustainable Development. Pàtron Editore, Bologna. 139-154.

Technical Reports/Whitepapers

1. Modupe Jimoh, Alexander Darlington, Joanna Collingwood, and **Iyabosola Busola Oronti**, 'Addressing under-representation in STEM', Paper prepared by members of the Equality and Diversity Committee, School of Engineering, University of Warwick, in response to House of Commons Inquiry, January 2022.

2. Velazquez, A., Lin, Y. L., Popoola, O., Akinloye, S., Pecchia, L., **Oronti, B.,** Judd, T., David, Y., Ayala, R., Poluta M. & Stavrianou K. (2020). Masks, Respirators, and Face Shields [White paper]. Published by The International Federation for Medical and Biological Engineering (IFMBE). Retrievable from: https://ced.ifmbe.org/blog/who-ced-covid19-townhalls.html