CURRICULUM VITAE

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4. SEX: Male
5. DATE OF BIRTH: December 12, 1985
6. PLACE OF BIRTH: Delta State
7. NATIONALITY: Nigerian
8. MARITAL STATUS: Single
9. STATE OF ORIGIN: Delta
10. SENATORIAL DISTRICT: Delta Central
11. LOCAL GOVERNMENT AREA: Ughelli South
12. POST APPLYING FOR: Lecturer I (Computer Science)

EDUCATIONAL INSTITUTION ATTENDED (WITH DATES)

(i)	Federal University of Technology, Akure, Nigeria	2016-2021
(ii)	Obafemi Awolowo University, Ile-Ife, Nigeria	2012-2014
(iii)	Obafemi Awolowo University, Ile-Ife, Nigeria	2009-2011
(iv)	Olabisi Onabanjo University, Ago-Iwoye, Nigeria	2003-2007

PURE ACADEMIC QUALIFICATION (WITH DATES)

(i) Ph.D. Computer Science	September, 2021
(ii) M.Sc (Computer Science)	September, 2014
(iii) PGD (Computer Science)	February, 2011
(iv) B.Sc. (*Hons.*) (Physics)	July, 2007

TEACHING EXPERIENCE

- **Lecturer (2022 – Till date):**
  Lecturer/SIWES Coordinator/Level Adviser (#2023819)- Landmark University, Omu-Aran, Department of Computer Science. Taught 3 core computing courses including postgraduate.
- **Lecturer (2018 – 2022):**
  Lecturer/College Officer/ICT Office (#1548000)- Oduduwa University, Ipetumodu, Department of Computer Science. Taught over 10 Computer Science courses and was in charge of result processing for the College of Natural and Applied Sciences Administration.
- **Teaching/Research Assistant (2012- 2018):**
  Tutor/Research personnel (#222000/annum)- Network Utilisation Maximisation Research Sub-group, Comnet Lab, Department of Computer Science and Engineering, Obafemi Awolowo University Ile-Ife. Research, teach, formulate course contents and assist facilitators/cordinators in local conferences (e.g Aicttra and Nigeria Computer Society (NCS) conferences).
- **Gwadabawa Technical College, Sokoto State (2007-2008):**
  Tutor (#162000/annum)- Taught mathematics and physics in final classes. I also taught physics and Mathematics.
- **Soapel Schools, Lagos (2006):**
  Account officer/Teacher (#114000/annum)- Collection of cash payment of school fees from students and submission of daily record to general supervisor

RESPONSIBILITIES AT PREVIOUS EXPERIENCE

(i)   *Lecturing at Landmark University: Taught and examined 3 core computing courses including a postgraduate course. Supervised 5 machine learning projects that are currently under-review for publication.*
      Theory of Computing, Principles of Compilers and Introduction to Problem Solving.
(ii) *SIWES Coordinator at Landmark University: Coordinated SIWES program at the departmental level, both on field and administratively for the 2021/2022 academic session. Examining SIWES reports and processing necessary documents at completion.*
(iii) *Level Adviser at Landmark University: Served as 400 level (final year) adviser in 2021/2022 academic session. Resolving issues with course registration, missing attendance and exam eligibility.*
(iv) *Lecturing at Oduduwa University: Taught core computer science courses (11 courses) across three academic sessions from 100 to 400 level. I also supervised over 30 undergraduate projects. Courses Taught in 2018/2019, 2019/2020, 2020/2021 academic year include*
      Operating System I & II, Computer Electronics, Hardware Devices, Structured Programming, Internet Technology, Simulation and Modeling, Data Structure and Algorithms, Algorithm Complexity Analysis, Survey of Programming Languages, Queuing Systems and Selected Topics in Computing.
(v)   *Research Head:* Lead Researcher at Embedded Vision Laboratory, Department of

Computer Science, Oduduwa University, Ipetumodu. Led a team of undergraduate students in intelligent vision applications such as automatic vehicle license plate recognition systems, data-driven traffic-light control system and real-time character recognition system.

(vi) *College Officer at Oduduwa University:* Processed, Collated and Prepared college result for Senate Sittings.

(vii) *ICT Officer at Oduduwa University:* Managed university webpage and staff/students login creation. Install, configure and setup Moodle for e-learning and university CBT exams. Develop result processing portal for College of Natural and Applied Sciences.

(viii) *Research Assistant at Network Utilization and Maximization Research Group:* I was exposed to Grant proposal writing and application. I was part of the team that wrote the grant proposal that won a Tertiary Education Trust Fund; TETFund Research Project Intervention, Grant/Award Number TEFT/ESS.D/NOM-RP/BAS&BNAS in 2015.

(ix) **Teaching Assistant at Network Utilization and Maximization Research Group:** *Taught Embedded Systems using Hardware Description Language; CSC 602(Computer Engineering II) Rain 2013/2014 and CSC 615 (Embedded System Design) Harmattan 2015/2016:* As a teaching and research assistant to a Reader at the department of Computer Science and Engineering, Obafemi Awolowo University, Ile-Ife, I coordinated and facilitated the lab sessions of postgraduate courses, designing and implementing digital systems on embedded hardware.

(x) **Facilitator/Supervisor at Network Utilization and Maximization Research Group:** *Reconfigurable and Embedded System Undergraduate Student Group:* During my master's program, I took up a challenge of working with newly acquired reconfigurable devices at the department. After successfully managing the reconfigurable lab and completing a master's research using the reconfigurable device, IT students were assigned to the lab. I trained and guided these students in their sessional industrial attachment program on embedded system programming using FPGAs. Each student was able to develop embedded firmware like Simple Processor, Traffic Control System, Temperature Sensors, e.t.c. (www.comnet.oauife.edu.ng)

(xi) **Lecturer at Techinal College (2008):** *Taught Physics and Mathematics:* During my National Youth Service Corp, I was opportune to work at a technical college in Gwadabawa, Sokoto State. For three terms I taught physics and mathematics at senior grades and prepared finalist for their national exams.

(xii) **Tutor at Secondary School(2006):** *Taught Physics and Computer Science:* This is my first work experience, obtained during my final year at the university. I opted to take a job during a short break resulting from an industrial action, and due to my passion for teaching I decided to work as a tutor in a nearby college.

PRESENT EMPLOYMENT

STATUS: Lecturer II   SALARY: #2,023,819.8/per annum

RESEARCH INTEREST AND ACTIVITIES

- Computer Architecture
- Medical Image Analysis

- Embedded Image Processing and Recognition
- Machine learning Algorithms

(A) *Image Processing and Recognition on Embedded Platforms (PHD):* My Current research activity is in the area of image processing and recognition on microprocessors and Field Programmable Gate Array (FPGA) custom computing platforms. Lately, in an on-going research I embed an Automatic Number Plate Recognition (ANPR) system suitable for vehicular management and control in an FPGA. Presently, we are working on designing suitable image processing architecture on Field Programmable Gate Array (FPGA) for novel image processing algorithms. These algorithms have been proven on microprocessors with good recognition accuracy. Hence, we are focused on replicating these algorithms to produce near-similar results for embedded systems. This is expected to achieve good computing resource utilization while maintaining performance accuracy comparable with those obtained on microprocessor. The research inspired by a parent research project whose goal is to integrate an ANPR, Car Make and Model Recognition (CMMR), and Licensed Driver Identification (LDI) system within an FPGA core for intelligent traffic management and control. A paper on this project has been published with The Institute of Engineering and Technology (IET) image processing journal.

(B) *Digital Instrumentation (M.Sc)*: In my research into the development of a noise-resistant digital temperature sensor for embedded systems, I worked with a Field Programmable Gate Array (FPGA) chip with the ultimate aim of integrating a temperature sensing model within a Stratix III chip. The model was expected to be resistant to static supply voltage shift with improved accuracy for the reliability of digital systems. This research has been completed, having obtained the expected results after analysis a prototype of the temperature sensor was developed and tested on an Altera Development and Education Board 3 (DE3) equipped with a Stratix III FPGA processor. The result was the developement of an efficient portable sensing technique for temperature sensors integrated within an FPGA chip. Two papers have already been published from it and are available on the IEEE online store.

From my previous research activities, my area of specialization is basically computer science with special interest in *Digital Instrumentation and signal processing*, specifically *digital signal processing systems (using custom or reconfigurable device).* With strong interest in *Sensing*, the theme of my research is digitization of various signal, such that analog system information could be rendered in an equivalent digital state with minimal inaccuracy.

Lately, I have also been involved in *Digital Forensic for Cloud Computing Platforms*, having been rendering research assistance to a current Ph.d work in that area. A paper has been published from it where I stand in as a second author.

PUBLICATIONS

FULL PAPER: P. A. Akpojotor, A. O. Adetunmbi, A. O. Oluwatope, K. B. Alese. *Automatic License Plate Recognition on Microprocessors and Custom Computing Platforms: A Review. IET Image Process. 2021;1-19. https://doi.org/10.1049/ipr2.12262.*

FULL PAPER: P. A. Akpojotor, A. O. Oluwatope, K. P. Ayodele. *A Field Programmable Gate Array-Based Digital Temperature Sensor's Sensitivity to* V_{DD}

Variation. IEEE 4th Mediterranean conference on Embedded Computing, Budva, 2015.

FULL PAPER: B. Opara, P. A. Akpojotor, A. O. Oluwatope, G. A. Aderounmu. Cloud Collaboration for Forensically Ready Cyber Space. *International Journal of Scientific and Engineering Research, Vol. 6, May 2015.*

FULL PAPER: P. A. Akpojotor, A. O. Oluwatope, K. P. Ayodele, A. G. Aderounmu and R. Adagunodo. *A Field Programmable Gate Array-Based Digital Temperature Sensor with Improved Immunity to Static Supply Shift. IEEE 17th Euromicro Conference on Digital System Design, pp. 1-8. August 2014.*

FULL PAPER: O. Kehinde, P. A. Akpojotor, and A. O. Oluwatope. *Self-Adjustable Delay-Line for Temperature Sensing on Field Programmable Gate Array. Conference on Embedded Systems 2021. (Updated version Accepted for publication IEEE Letter for Embedded Systems 2022)*

REFEREES

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SIGNATURE