



# **CURRICULUM VITAE**

## **01. PERSONAL**

- (i) **Name:** - **PROFESSOR FOLORUNSO, Olusegun**
- (ii) **Date of Birth:** - 7<sup>th</sup> October, 1968
- (iii) **Place of Birth:** - Abeokuta
- (iv) **Age:** - 52 Years
- (v) **Sex:** - Male
- (vi) **Marital Status:** - Married with 3 Children- 22,20 and 16yrs
- (vii) **Nationality:** - Nigerian
- (viii) **Town/ State Of Origin:** - Abeokuta South LG/ OGUN State
- (ix) **Contact Address:** - c/o Department of Computer Science,  
Federal University of Agriculture,  
P.M.B. 2240, Abeokuta.
- (x) **Phone Number:** - 234-8035640707
- (xi) **E-Mail Address:** - folorunsoo@funaab.edu.ng
- (xii) **Current Position:** - **Head, Department of Computer Science**
- (xiii) **Rank** - **Professor of Computer Science**

## **02. EDUCATIONAL BACKGROUND**

- (i) **Educational Institutions Attended (with dates)**
  - (a) University of Agriculture, Abeokuta - October, 1998 – July, 2003
  - (b) University of Lagos, Nigeria - October, 1995 – March, 1997
  - (c) University of Agriculture, Abeokuta - October, 1988 – Sept., 1992
- (ii) **Academic and Professional Qualifications (with dates)**
  - (a) Ph.D. (Computer Science) - July, 2003
  - (b) M.Sc. (Computer Science) - March, 1997

- (c) B.Sc.(Hons) Mathematical Sciences - September., 1992  
(Second Class Upper Division)
- (iii) **Prizes, Honours, Scholarship, National And International Recognition**
  - (a) **International Recognition**
    - A Fellow of United Nation University (UNU) International Institute of Software Technology (IIST). 4-month Study and Research fellowship at **Ball State UNIVERSITY, Muncie, Indiana, U.S.A.** 1<sup>st</sup> September to 18<sup>th</sup> December, 2004.
    - Visiting Professor Centre d'Excellence Regional Sur les Sciences Aviaires (CERSA), Universite De Lome. Togo –April, 2017
  - (b) **National Recognition**
    - News in Africa 2009 outstanding Leaders Gold Award for excellent contributions in the development of *Computer Technology in Nigeria*.
  - (c) **State Recognition**
    - Member Governing Council of Tai Solarin University of Education, Ijagun , Ijebu- Ode, Ogun State 2019

### **03. WORK EXPERIENCE**

- (i) **Professor** (October, 2015 – Date)  
Department of Computer Science, Federal University of Agriculture, Abeokuta.  
*Duties:*
  - Teaching of Computer Science courses at both undergraduate and postgraduate levels
  - Supervision of students
  - Academic research
  - All other responsibilities assigned by the HOD
- (ii) **Reader** (October, 2012 – October, 2015)  
Department of Computer Science, Federal University of Agriculture, Abeokuta.  
*Duties:*
  - Teaching of Computer Science courses at both undergraduate and postgraduate levels
  - Supervision of students
  - Academic research
  - All other responsibilities assigned by the HOD
- (iii) **Senior Lecturer** (October, 2007 – September, 2012)  
Department of Computer Science, Federal University of Agriculture, Abeokuta  
*Duties:*
  - Teaching of Computer Science courses at both undergraduate and postgraduate levels
  - Supervision of students
  - Academic research

- All other responsibilities assigned by the HOD
- (iv) **Lecturer I** (October, 2004 – September, 2007)  
Department of Computer Science, University of Agriculture, Abeokuta  
*Duties:*
- Teaching of Computer Science courses at both undergraduate and postgraduate levels
  - Supervision of students
  - Academic research
  - Departmental Postgraduate Coordinator
  - All other responsibilities assigned by the HOD
- (v) **Lecturer II** (May, 2001 – September, 2004),  
Department of Mathematical Science, University of Agriculture, Abeokuta  
*Duties:*
- Teaching of Computer Science courses at undergraduate level
  - Supervision of students
  - Academic research
  - All other responsibilities assigned by the HOD
- (vi) **Assistant Lecturer** (September, 1998 – April, 2001)  
Department of Mathematical Sciences, University of Agriculture, Abeokuta  
*Duties:*
- Teaching of Computer Science courses at undergraduate level
  - Supervision of students
  - Academic research
  - All other responsibilities assigned by the HOD
- (vii) **Graduate Assistant** (June, 1995 – September, 1998)  
Department of Mathematical Sciences, University of Agriculture, Abeokuta  
*Duties:*
- Teaching tutorials of Computer Science courses
  - Academic research
  - All other responsibilities assigned by the HOD
- (vi) Coordinator, CSC 201 - 2002/2003, 2003/2004 Sessions
- (vii) Coordinator, CSC 701 - 2003/2004, 2004/2005, 2008/2009 Sessions
- (viii) Postgraduate Coordinator - January, 2006 – April, 2008
- (ix) Member, College Board of Studies - March, 2006 – March, 2008
- (x) Member, College Postgraduate Board - April, 2006 – April, 2008
- (xi) **SUPERVISION**
- Supervised more than 100 undergraduate research projects.
  - Supervised more than 40 postgraduate diploma research projects.
  - Supervised more than 30 M.Sc. Dissertations
  - Supervised and graduated 3 PhD computer science Theses

**(xii) AREAS OF RESEARCH INTERESTS IN COMPUTER SCIENCE**

Databases and Information Systems, Information Security, and Intelligent Systems

**(xiii) COURSE TAUGHT RECENTLY**

Course Code	Description	Number of Students	Credit Units	Number of Lecturers
<b>2011/2012 Undergraduate Courses</b>				
CSC 201	Computer Programming	2,500	3	8
CSC 411	Organization of Programming Languages	56	3	1
<b>2011/2012 Postgraduate Courses</b>				
CST 711	Management Information System	14	2	1
PDC 702	System Analysis and Design	21	3	1
CSC 702	Advanced Database Technology	18	3	1
CSC 716	Current Topics in Computer Science	14	3	1
<b>2012/2013 Undergraduate Courses</b>				
CSC 211	Computers for Agriculture Students	1,400	3	6
CSC 315	File Organization/Data Processing	19	3	1
CSC 411	Organization of Programming Languages	69	3	1
<b>2012/2013 Postgraduate Courses</b>				
CSC 701	Use of Computers in Research	750	4	7
CST 709	Foundation of Information Communication Technology	16	2	1
CSC 713	Artificial Intelligence	34	3	1
CST 719	XML and Related Technology	16	2	1
PDC 702	System Analysis and Design	30	2	1
CSC 702	Advance Database Technology	38	3	1
CST 716	Current Topics in Computer Science	16	3	1
<b>2013/2014 Undergraduate Courses</b>				
CSC 211	Computers for Agriculture Students	1,400	2	4
CSC 315	File Organization and Data Processing	11	3	1
CSC 411	Organization of Programming Languages	74	3	2
CSC 426	Computer Communication System	34	3	1

CSC 427	Artificial Intelligence	76	3	2
<b>2013/2014</b>				
<b>Postgraduate Courses</b>				
CSC 701	Use of Computers in research	750	4	7
CST 709	Foundation of Information Communication Technology	8	3	1
CST 715	Artificial Intelligence	19	3	1
CSC 702	Advance Database Technology	18	3	1
<b>2014/2015</b>				
<b>Undergraduate Courses</b>				
CSC 101	Introduction to Computer Science	289	2	2
CSC 211	Computers for Agriculture Students	1,265	3	4
CSC 315	File Organization and Data Processing	11	3	1
CSC 427	Artificial Intelligence	65	3	1
<b>2014/2015</b>				
<b>Postgraduate Courses</b>				
CSC 701	Use of Computers in research	750	3	7
CST 709	Foundation of Information Communication Technology	16	2	1
CSC 713	Artificial Intelligence	51	3	1
PDC 716	Database Systems	33	3	1
CSC 702	Advance Database Technology	51	3	1

#### **4. SPECIAL ASSIGNMENTS/COMMUNITY SERVICE**

##### **(a) Within the University**

- i. Member, Local Organizing Committee, International Conference of Mathematical Scientists, African Mathematical Union, Abeokuta, Nigeria  
16<sup>th</sup> – 23<sup>rd</sup> Nov., 2003
- ii. Member, Local organizing committee, 1<sup>st</sup> International Conference on Science and National Development, University of Agriculture, Abeokuta, Nigeria  
25<sup>th</sup> – 28<sup>th</sup> Oct., 2004
- iii. Member, COLNAS representative to serve on university's HOUSEPAC committee 2003/2004 session.
- iv. Member, Committee on the conversion of MP03-04 classrooms to Central Computer Laboratory - 2009
- v. Chairman, NUC Accreditation Preparation Committee of Department of Computer Science, University of Agriculture, Abeokuta. -2008-2013
- vi. Member, Committee on National Institutional Ranking of Universities (CONIREX) - 2010
- vii. Member, Committee on establishment of Community and Internet Radio in UNAAB. - 2010
- viii. Member, Committee of Deans and Directors (CODAD) - 2014 - till date
- ix. Member, NUC Mock Accreditation for Civil Engineering Department, FUNAAB, organized by Academic Planning Unit. - 2013
- x. Member, committee on enhancement of Classroom and Teaching facilities  
- 2011
- xi. Member, Task force Committee on ICTREC project implementation.  
-2010-2012
- xii. Member, Committee on Grant proposal writing for African Centre of Excellence in Agriculture, - 2013
- xiii. Member, Committee on Development of ICT policy for the University  
- 2013
- xiv. Member, Promotion Assessment Panel Library - 2015
- xv. Member, Screening Exercise for prospective students -2010- 2011
- xvi. Coordinator ICT Projects – CENHURD - January, 2007-April, 2010
- xvii. Head, Webometrics Centre, (Vice-Chancellor's Office)  
Federal University of Agriculture, Abeokuta.  
- August 2010 - August 2014

- xviii. Director, Center for Innovation and Strategy in Learning and Teaching (Vice-Chancellor's Office) Federal University of Agriculture, Abeokuta.  
August 2014- August 2016
- xix. Head, Department of Computer Science, FUNAAB. Abeokuta. 1<sup>st</sup> August 2019 –Till Date

(b) **Outside the University**

- i. Adjunct Professor, Olabisi Onabanjo University, Ago-Iwoye- 2019
- ii. External Examiner, Department of Computer and Information Sciences, Covenant University, Ota. - 2014- 2019
- iii. External Examiner, Department of Computer Science, Bells University of Technology, Ota - 2012- 2013
- iv. External Examiner, Department of Computer Science, Ladoke Akintola University of Technology, Ogbomosho - 2012 till date
- v. External Examiner, Department of Computer Science, Obafemi Awolowo University, Ile-Ife - 2012 till date
- vi. External Examiner, Department of Computer Science, Emmanuel Alayande College of Education, Oyo. - 2010- 2012
- vii. External Examiner, Department of Computer and Information Science, Tai Solarin University of Education, Ijebu-Ode - 2009-2010

**05 TRAINING PROGRAMME ATTENDED (with dates)**

- i. 1<sup>st</sup> DNA Fingerprinting and Diagnosis organized by Genomic Group, University of Agriculture, Abeokuta - July, 2010
- ii. Nigeria Computer Society (NCS) Conference, Abeokuta - June, 2008
- iii. International Visiting Scholar, Ball State University, Department of Computer Science, Muncie USA on an exchange programme supported by UNU-IIST (The United Nations University and Institute of Software Technology), Macau, - Aug.-Dec. 2004

- iv. International course on Software Project Management, Organized by UNU/IIST in conjunction with Department of Computer Science, University of Lagos, Nigeria  
- June, 2004
- v. ETF Capacity Building Information Technology Workshop, OAU, Ile-Ife  
-November, 2003
- vi. A workshop on Information and Communication Technology (ICT) organized by ETF (Education Tax Fund) in collaboration with the Obafemi Awolowo University, Ile-Ife.  
- October, 2003
- vii. School on Industrial Software Engineering organized by The United Nations University and Institute of Software Technology, Macau in collaboration with the University of Lagos, Akoka, Lagos.  
- October2002
- viii. Computer Association Of Nigeria Conference, Abuja - June, 2002
- ix. A four week Advanced Courses on Software Development with VDM and REAL TIME Systems Development with Duration Calculus organized by The United Nations University and Institute of Software Technology, Macau in collaboration with the Obafemi Awolowo University, Ile–Ife, Nigeria. - October, 2001
- x. Workshop on Linear and Non Linear Analysis in Engineering and Sciences organized by National Mathematical Centre, Abuja, Nigeria. - October, 1999
- xi. Computer Association Of Nigeria Conference, Abuja - June, 1998
- xii. Nigerian Universities Network Project organized by National Universities Commission and International Centre for Theoretical Physics: Nunet Capacity Building Workshop (NUC and ICTP, Trieste Italy). - November, 1997

## **06. COMMENDATION**

- i. Commendation by the Senate of the University for dedication and Commitment based on the report of Webometrics ranking of the Federal University of Agriculture, Abeokuta by the Cybermetrics Laboratory, Spain as the second Best University in Nigeria in January, 2013.
- ii. Commendation by the University management for dedication and commitment during a 7- week long proposal packaging for a University-wide bid in response to the world Bank Africa Centre of Excellence (ACE) Grant call, Federal University of Agriculture, Abeokuta, Nigeria, 2013.



## **07. MEMBERSHIP OF PROFESSIONAL BODIES**

- i. Nigerian Computer Society (NCS) M/No : 001174
- ii. Computer Professional Registration Council of Nigeria (CPN) 000485/1998

## **08. RESEARCH INTEREST, OR COMMISSIONED PROJECTS**

### **Completed**

- (i) Re-inventing the Wheels of Computing Education for Sustainable Development. (A Maiden Seminar for repositioning Department of Computer Science, College of Physical Sciences, Federal University of Agriculture, Abeokuta Nigeria. Presented on April 15, 2015).

### **In progress**

- (ii) Knowledge Management system in Agricultural Developments Projects.
- (iii) A framework for a sustainable e-Government in Nigeria
- (iv) Developing a Social Network Sites for Professionals and Retirees in Nigeria.
- (v) Development of Software for Post Harvest losses and Food Security Management in Nigeria using Crowdsourcing Strategy

## **09. PUBLICATIONS**

- (i) **Folorunso Olusegun** (1992) Academic Library Information Systems, B.Sc Project, Department of Mathematical Sciences, University of Agriculture, Abeokuta, Nigeria.

**Folorunso Olusegun** (1997) A fuzzy Modelling for Nigeria Stock Market, M.Sc Dissertation, Department of Computer Sciences, University of Lagos, Nigeria.

**Folorunso Olusegun**(2003) A Framework for visualizing Runtime Characteristics of Real-time Database Systems, PhD Thesis, Department of Mathematical Sciences, University of Agriculture, Abeokuta, Nigeria.

### **(ii) For Journal Articles in Print:**

- (1) **Folorunso, O** and Sofoluwe J.O (2002): On Randomized Expert System for “Ifa” (An African traditional oracle). *ASSET series B*, **1(2); 65-75**, Published by ASSET An International Journal, University of Agriculture, Abeokuta. Nigeria
- (2) **Folorunso, O.** and Akinwale A.T (2003): Comparison of Existing Internal Sorting Techniques. *ASSET series B*, **2(1); 61-72**. Published by ASSET An International Journal, University of Agriculture, Abeokuta. Nigeria.
- (3) **Folorunso O.**, Longe H.O.D, Akinde A.D and Ishola K.A (2004) : A framework for establishing agriculture e-commerce resource center in Nigeria. *The Journal*

*Of Computer Science And Its Applications*,10(1); 141-149. Published by The Nigeria Computer Society. Nigeria

- (4) Ogunde, O.A, **Folorunso O.** and A.S Sodiya (2005): An Improved Algorithm for Mining Top-K Frequent item set with minimum Length – M in transaction Databases (2005). *ASSET series B*, 4(1); 57-73, Published by ASSET, An International Journal, University of Agriculture, Abeokuta Nigeria.
- (5) **Folorunso, O.** Awe, O.G, Sushil K. Sharma and Zheng, J. (2006): Factor Affecting Adoption of E-Commerce: A Case of Nigeria. *Journal of Applied Sciences*, 6(10); 2224-2230. Published by Asian Network for Scientific Information. Asia. Available online at <http://www.scialert.net/pdfs/jas/2006/2224-2230.pdf>
- (6) **Folorunso, O.** Longe, H.O.D Ikekwere, A.C and Sharma, S.K(2006): A framework for encrypting the Huffman Algorithm. *Journal of Applied Sciences*, 6(5); 1138-1141. Published by Asian Network for Scientific Information. Asia. Available online at <http://www.scialert.net/pdfs/jas/2006/1138-1141.pdf>
- (7) **Folorunso, O.** Sushil, k Sharma, Longe H.O.D and Lasaki, K.(2006): An Agent Based model for Agriculture e-commerce system. *Information Technology Journal*, 5(2):230-234. Published by Asian Network for Scientific Information. Asia. Available online at <http://scialert.net/abstract/?doi=itj.2006.230.234>.
- (8) **Folorunso, O.** Ogunseye, O.S and Sushil ,K. S (2006) : An Exploratory study of the critical factors affecting the acceptability of e-learning in Nigeria university. *Information Management and Computer Security*, 14(5): 496-504. Published by Emerald Group Publishing Limited, UK.
- (9) Vincent, O.R. **Folorunso, O.** and Agboola, A.A.A. (2006): A Modified Algorithm Image Compression. *The Journal of Computer Science and Its Applications*, 13(1); 42-48. Published by The Nigeria Computer Society, Nigeria.
- (10) **Folorunso O.** and Akinwale A.T. (2008): A Conceptual Analysis and Design of Management System for “Ifa”: *Kybernetes*. 38(3/4); 625-634. The International Journal of Cybernetics, Systems and Management Sciences Published by Emerald Group Publishing Limited, UK.
- (11) Vincent, O. R., **Folorunso O.** and Akinde A. D. (2009): On Consolidation Model in E-Bill Presentment and Payment. *Information Management and Computer Security*, 17(3); 234-247. Published by Emerald Group Publishing Limited, UK.

- (12) Vincent, O. R., **Folorunso O.** and Akinde A. D (2009): Agent-Based Advert Placement System for Broadcasting Stations, *Issues of Informing Science and Information Technology, USA*, **6(1);395-404**. Published by Informing Science Institute, USA. Available online at: <http://iisit.org/>
- (13) Okeyinka, I.K. Akinwale, A.T. Oluwalope, A.O, **Folorunso O.** and Abiona O.O.(2009): Multiple Startup Scheme for TCP. *The Journal Of Computer Science And Its Applications*,**16(2); 68-80**. Published by The Nigeria Computer Society, Nigeria.
- (14) Agbaje, M.O, Akinwale, A.T., **Folorunso, O.**, and Njah, A. N (2009): Effect of Block Sizes on the Attributes of Watermarking Digital Images. *International Journal of Nonlinear Science*, **9(3); 358-366**. Published by World Academic Press, World Academic Union, UK. Available online at: <http://www.worldacademicunion.com/journal/1749-38893897IJNS/IJNSVol09No3Paper16.pdf>
- (15) Vincent O.R., **Folorunso O.**, Akinwale A.T. and Akinde A.D (2009). Transaction Flow in Card Payment Systems Using Mobile Agents. *Interdisciplinary Journal of Information, Knowledge, and Management*; **5(1), 153-166**. Published by Informing Science Institute, USA. Available online at [http:// www.ijikm.org/Volume5/IJIKMv5p153-166Vincent458.pdf](http://www.ijikm.org/Volume5/IJIKMv5p153-166Vincent458.pdf)
- (16) Vincent, O. R., **Folorunso O.** and Akinde A. D. (2010): Improving E-payment Security using Elliptic Curve Cryptosystem. *Electron Commer Res*, **10 (1); 27-41**. Published by Springer Science + Business Media, Germany.
- (17) **Folorunso, O.** and Akinwale, A.T. (2010): Developing Visualization Support system for Teaching/Learning database Normalization. *Campus-Wide Information Systems*, **27(1); 25-39**. Published by Emerald Group Publishing Limited, UK.
- (18) **Folorunso, O.**, Ateji O.A and Awe O. (2010): An Exploratory Study of Critical Factors Affecting the Acceptability of Automated Teller Machine (ATM) in Nigeria. *Journal “Annals. Computer Science Series”*, **8(1); 151-162**. Published by Faculty of Computers and Applied Computer Science, Tibiscus University of Timisoara, Romania.
- (19) **Folorunso, O.**, Vincent, O.R. and Salako, O.(2010): An Exploratory Study of Critical Factors Affecting the Efficiency of Sorting Techniques (Shell, Heap and Treap). *Journal “Annals. Computer Science Series”*, **8(1); 163-172**. Published by Faculty of Computers and Applied Computer Science, Tibiscus University of Timisoara, Romania.

- (20) **Folorunso, O.**, Ogunde, O.A., Vincent, O.R and Salako, O (2010): Data Mining for Business Intelligence in Distribution Chain Analytics. *International Journals of the Computer, the Internet and Management*, **18(1)**, 15-26. Published by Assumption University Thailand. Available online at: <http://www.ijcim.th.org/>
  
- (21) Elugbadebo O.J, Sodiya A.S. and **Folorunso .O** (2010). **An Improved technique for multi-dimensional constrained gradient mining.** *ASSET series B*, **9(1)**; pp 23-39. Published by ASSET An International Journal, University of Agriculture, Abeokuta. Nigeria.
  
- (22) **Folorunso, O.**, Akinwale, A.T. and Adekanbi A(2010): A Minimal Closure Algorithm For Quantifying Impact Of Requirement Changes On Network Performance. *Journal “Annals. Computer Science Series’*, **8(2)**; 129-144. Published by Faculty of Computers and Applied Computer Science, Tibiscus University of Timisoara, Romania.
  
- (23) **Olusegun Folorunso**, Rebecca O. Vincent, Adewale Opeoluwa Ogunde and Benjamin Akintayo Agboola (2010): Knowledge sharing adoption Model based on Artificial Neural Networks *International Journal of E-Adoption*, **2( 4)**; pp. 1-14. Published by IGI Publishing House, U.S.A.
  
- (24) **Folorunso O.**, Ogunde A. O., Vincent O. R. and Akanji O. O.(2010) “PIFA: Designing a Personalized Information Filtering Algorithm for Knowledge Management Systems”. *Annals Computer Science Series*, **Vol. 8, No 2. Pp 145-159**. Published by Faculty of Computers and Applied Computer Science, Tibiscus University of Timisoara, Romania. Available online at <http://www.anale-informatica.tibiscus.ro/download/lucrari/8-2-13-Folorunso.pdf>
  
- (25) Adesina Abdul Akeem Agboola, Misturah Adunni Alaran, Adio Taofiki Akinwale and **Olusegun Folorunso** (2010) An Improved Intravenous Fluid Rate Determination using Fuzzy Logic. *International Journals of the Computer, the Internet and Management*, **18(3)**, 1-9. Published by Assumption University Thailand. Available online at: [http://www.ijcim.th.org/past\\_editions/2010V18N3/p1-9-Paper\\_1\\_IJCIM\\_V18n3.pdf](http://www.ijcim.th.org/past_editions/2010V18N3/p1-9-Paper_1_IJCIM_V18n3.pdf)
  
- (26) Adio Akinwale, **Olusegun Folorunso**. and Adesina Sodiya (2011): Derivation of databases Keys’ operations. *Issues in Informing Science and Information Technology*, **Volume 8**, pp277-291. Published by Informing Science Institute, USA.

- (27) Kolawole I. Oyeyinka, Ayodeji Oludola Oluwatope, Adio T. Akinwale, **Olusegun Folorunso**, Ganiyu A. Aderounmu and Olatunde O. Abiona (2011): TCP Window Based Congestion Control-Slow-Smart Approach. **Communications and Network 3 (2): 85-98**. Published by Scientific research, China.
- (28) Adesina Simon Sodiya, **Olusegun Folorunso**, Saidat Adebukola Onashoga, and Omoniyi Paul Ogunderu (2011): An improved Semi-Global Alignment Algorithm for Masquerade Detection *International Journal of Network Security*, **13 (1); 31-40**. Published by National Chung Hsing University, Taiwan.
- (29) Adio Akinwale, Kolawole Adesina and **Olusegun Folorunso** (2011): A framework for reducing Multidimensional Database to Two Dimensions. *Journal of Information and Computing Science*, **Vol. 6, No. 4, pp 269-278**. Published by World Academic Press, World Academic Union, England, U.K.
- (30) Sodiya A. S, **Folorunso O**, Komolafe P.B, and Ogunderu O.P (2011): Preventing Authentication Systems from key logging Attack, *Journal of Information Privacy and Security* **7:2, pp. 3 – 27**. Published by Global Business Resources of the University of Wisconsin – Whitewater. U.S.A.
- (31) Ogunde, A. O., **Folorunso O.**, Sodiya, A. S., and Oguntuase, J. A. (2011): Towards An Intelligent Multi-Agent Architecture for Association Rule Mining in Distributed Databases. *Computing and Information Systems*, **15(2), pp. 1-16**. Published School of Computing, University of the West of Scotland, High Street. Paisley, Scotland. U.K.
- (32) Akinwale A. T., Adebayo A. A., **Folorunso O.** and Adebayo G. A. (2011): An Improved Selection Technique for fast packet Routing in Computer Network **International Journal of Computing Vol. 10, Issues 3, pp. 223 – 234**, Ukraine.
- (33) Ogunde, A. O., **Folorunso O.**, Sodiya, A. S., Oguntuase, J. A., and Ogunleye, G. O. (2011). Improved cost models for agent-based association rule mining in distributed databases. *Annals. Computer Science Series, 9th Tome-1st Fasc*, **231-251**. Published by Faculty of Computers and Applied Computer Science, Tibiscus University of Timisoara, Romania.
- (34) Abdulwasiu Kailani AbdulRahim , **Olusegun Folorunso** and Sushil Sharma (2011) An Improved Dynavote E-Voting Protocol Implementation *International Journal of E-Adoption* **3(3): 44-61**. Published by IGI Publishing House, U.S.A.
- (35) Oyeyinka, I. K., Akinwale, A. T., **Folorunso O.**, Olowofela, J. A., and Oluwatope, A. (2012). Asymptotic Stability Analysis of E-speed Start

Congestion Control Protocol for TCP. *International Journal of Computer Network and Information Security (IJCNIS)*, 4(4), 42-48, U.S A.

- (36) **Olusegun Folorunso**, Catherine Chen, Nazim U. Ahmed and Thomas Harris (2012): Towards Active Citizen-Centric E-Government Systems for Developing Countries. *International Journal of E-Adoption* 4 (2): 52-65. Published by IGI Publishing House, U.S.A.
- (37) Vincent O.R, **Folorunso O**, Adekoya A. F, Ibrahalu F.T and Jaiyeola G.I (2013): Enhancing E- payment security using Finite Element Inverse Algorithm. *The Journal of Computer Science and its Applications*. Vol. 20, No. 1 pp: 15- 25. Published by The Nigeria Computer Society, Nigeria.
- (38) Ojo A. H, **Folorunso O**. and Ojo D.O (2014): Fuzzy Expert System for the Intelligent Recognition of Cerebral Palsy, *Journal of Computer science and its Applications*, Vol. 21, No. 1, pp: 59- 72. Published by The Nigeria Computer Society, Nigeria.
- (39) **Olusegun Folorunso** (2014): An Architectural Model for Crowdsourcing for Human security Threats situation Information. *The Journal of Computer Science and its Applications*. Vol. 21, No. 2 pp: 85-96. Published by The Nigeria Computer Society, Nigeria.
- (40) Rufai, F. A, **Folorunso O**. and Usman O. L (2015): Predicting students' Enrollment using Generalized Feed- forward Neural Network. *Journal of Natural Sciences, Engineering and Technology*, Vol. 14, No.1; pp 58-70. Published by FUNAAB Journals. An International Journal, Federal University of Agriculture, Abeokuta. Nigeria.
- (41) **Olusegun Folorunso** (2015): A Fuzzy Trust Based Access Control Model for Affective Crowdsourcing. *The Journal of Computer Science and its Applications*. Vol. 22, No. 1, pp: 46-55. Published by The Nigeria Computer Society, Nigeria.
- (42) Kalejaye B. A, **Folorunso O.**, and Usman O.L (2015): Predicting students' Grade using Training Functions of Artificial Neural Network. *Journal of Natural Sciences, Engineering and Technology*, Vol.14 No.1; pp 25-42. Published by FUNAAB Journals. An International Journal, Federal University of Agriculture, Abeokuta. Nigeria.
- (43) **Folorunso, O.** and Mustapha, O. A. (2015): A Fuzzy Expert System to Trust Based Access Control in Crowdsourcing Environment. *Applied Computing and Informatics*, Vol. 11, pp 106- 129, Published by Elsevier B.V. Netherlands.
- (44) Bamigboye O., **Folorunso O.**, Akinwale A.T and Adebayo G.A (2015): Replication- based cost scheduling strategy for fault Tolerance in Distributed

Knowledge Management Systems. *Journal of Natural Sciences, Engineering and Technology, Vol. 14 No. 1; pp 43-57*. Published by FUNAAB Journals. An International Journal, Federal University of Agriculture, Abeokuta. Nigeria.

- (45) **Folorunso O.** (2015): Credit Card Fraud Detection using Firefly Algorithm. *Journal of the Nigeria Association of Mathematical Physics Vol. 31. No.1*. (Letter of Acceptance dated June 15, 2015).
- (46) **Folorunso O.** (2015): A Genetic algorithm for optimization of Trust- based knowledge Sharing Adoption Model. *Journal of Nigeria Association of Mathematical Physics, Vol. 31, No 1*, (Letter of Acceptance dated June 15, 2015).
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- (48) **Olusegun Folorunso**, Femi Emmanuel and Y.E Babalola (2016) Ca-NIDS: A Network Intrusion Detection System using Combinatorial Algorithm approach. Journal of Information Privacy and Security Vol 12 pp181-196. Published by Taylor & Francis Publishing Company.
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- (51) **Ayo F. E.**, Folorunso O., Folorunso S. O. (2018). A Combinatorial Algorithm for Benchmarking in Knowledge Sharing Environment. *International Journal of Intelligent Computing and Cybernetics*, Emerald. [https://doi.org/ 10.1108/IJICC-12-2017-0158](https://doi.org/10.1108/IJICC-12-2017-0158). United Kingdom
- (52) **Femi Emmanuel Ayo, Olusegun Folorunso, Friday Thomas Ibharalu, Idowu Ademola Osinuga(2020), Machine learning techniques for hate speech classification of Twitter data: State-of-the-art. Future challenges and research directions Computer Science Review 38 100311**  
<https://doi.org/10.1016/j.cosrev.2020.100311>
- (53) **Femi Emmanuel Ayo, Olusegun Folorunso, Friday Thomas Ibharalu, Idowu Ademola Osinuga(2020) Hate Speech detection in Twitter using hybrid**



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(54) Ayo Femi Emmanuel, Olusegun Folorunso, Friday Ibharalu, Idowu Osinuga, Adebayo Abayomi-Alli (2021) A Probabilistic Clustering Model for hate Speech classification in Twitter. Expert System With Applications ESWA-D-20-0070R3 ( Accepted )

(iv) **For Edited Conference Proceeding:**

- (55) **Folorunso.O**, Longe, H.O.D and IJERE U.L (2003): “E-LEARNING ECOSYSTEM: prospects for distance learners in Nigeria. *Proceedings 14<sup>th</sup> Annual Conference of Nigerian Computer Society (NCS)*, C.O.Uwadia, H.O.D Longe and Akinde (Eds.) : **257-261**. Published by NCS, Nigeria.
- (56) Ogunde, A.O and **Folorunso, O.** (2004): A framework for effective distributed data mining activities in Nigeria’s Health system. *Proceedings 1<sup>st</sup> international Conference on Contemporary Applications of the Mathematical and Computer Sciences to Development Problems* .G.O.S Ekhaguere (Ed). **137-145** Published by International Centre for Mathematical and Computer Sciences, Lagos, Nigeria.
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- (61) **Folorunso, O.** and Ogunseye, O.S (2006): Knowledge Management in Distance Education: Issues, Prospects and challenges. *Proceedings 17<sup>th</sup> Annual Conference of Nigerian Computer Society (NCS)*, Iteboje and Oyeyinka ( Eds.) : **277-282**. Published by Nigeria Computer Society, Nigeria.
- (62) **Folorunso, O.**and Awe O. G. (2006): A framework for establishing VSAT-WLL based rural Information, knowledge and service in Nigeria. *Proceedings 17<sup>th</sup> Annual Conference of Nigerian Computer Society (NCS)*, Iteboje and Oyeyinka ( Eds.) : **45-55**. Published by Nigeria Computer Society, Nigeria.
- (63) Ogunde, A.O., **Folorunso O.** and Ogunleye, G.O.(2010): A Knowledge Sharing Architectural Model for Inter-State E-Government in Nigeria. *Proceedings 23<sup>rd</sup> Annual Conference of Nigerian Computer Society (NCS)*, C.O.Uwadia, G.O. Aderounmu, Y. Folajinmi, and V. Ejiofor ( Eds.) : **3-14**. Published by Nigeria Computer Society, Nigeria.
- (64.) Ayannuga, O.O. and **Folorunso O.**(2010): Electronic Voters Authentication Management System(eVAMS). *Proceedings 23<sup>rd</sup> Annual Conference of Nigerian Computer Society (NCS)*, C.O.Uwadia, G.O. Aderounmu, Y. Folajinmi, and V. Ejiofor ( Eds.) : **105-110**. Published by Nigeria Computer Society, Nigeria.

## CONTRIBUTION TO BOOKS

- (65) **Olusegun Folorunso** (2018) Re-Engineering Nigerian Universities Research Endeavors for National Development Law and Practice of University in Nigeria, In Honour of Professor Saburi Adejimi Adesanya Edited by Professor Olusesan Oliyide. Published by TOG Publishers. Lagos. pp 232-249
- (66) **Olusegun Folorunso** (2018) Deploying Information & Communication Technology(ICT) Towards Growing and Developing Nigerian Universities Law and Practice of University in Nigeria, In Honour of Professor Saburi Adejimi Adesanya Edited by Professor Olusesan Oliyide. Published by TOG Publishers. Lagos. pp 250-272

## CONTRIBUTION TO NEWSLETTERS

1. **Olusegun Folorunso** -Re-inventing Computing Teaching Methods, CSC Newsletter A monthly Publication of Department of Computer Science, Federal University of Agriculture, Abeokuta. Vol 1. No.6. June2020 Pp2.
2. **Olusegun Folorunso** Referencing for Academic Writing CSC Newsletter A monthly Publication of Department of Computer Science, Federal University of Agriculture, Abeokuta. Vol 1. No.1. January2020 Pp1.
3. **Olusegun Folorunso** Challenges, way Forward for Quality Postgraduate Supervision, CSC Newsletter A monthly Publication of Department of Computer Science, Federal University of Agriculture, Abeokuta. Vol 1. No.3. March 2020 Pp1.
4. **Olusegun Folorunso** Marking Computer Science Graduates Marketable Employable, CSC Newsletter A monthly Publication of Department of Computer Science, Federal University of Agriculture, Abeokuta. Vol 1. No.3. March 2020 Pp2.
5. **Olusegun Folorunso** Covid-19: How Biomedical Informatics can support Health System, CSC Newsletter A monthly Publication of Department of Computer Science, Federal University of Agriculture, Abeokuta. Vol 1. No.4. April 2020 Pp1.
6. **Olusegun Folorunso** Post Covid-19: Restructuring Computing Programmes in Nigerian Universities, CSC Newsletter A monthly Publication of Department of Computer Science, Federal University of Agriculture, Abeokuta. Vol 1. No.5. May 2020 Pp1-2.
7. **Olusegun Folorunso** Re-Engineering Nigerian Universities using Global Ranking Models, CSC Newsletter A monthly Publication of Department of Computer Science, Federal University of Agriculture, Abeokuta. Vol 1. No.7. July2020 Pp1-4.
8. **Olusegun Folorunso** Preparing Our Academia for the Digital Economy, CSC Newsletter A monthly Publication of Department of Computer Science, Federal University of Agriculture, Abeokuta. Vol 1. No.8. August 2020 Pp1.
9. **Olusegun Folorunso** IT, Knowledge Economy and National Development: The Inseparable Triplets, CSC Newsletter A monthly Publication of Department of Computer Science, Federal University of Agriculture, Abeokuta. Vol 1. No.9. September 2020 Pp1-2.
10. **Olusegun Folorunso** Alumni and Nigerian Universities, CSC Newsletter A monthly Publication of Department of Computer Science, Federal University of Agriculture, Abeokuta. Vol 1. No.9. September 2020 Pp2.
11. **Olusegun Folorunso** Knowledge Management and National Development in Nigeria, Challenges and the way forward, CSC Newsletter A monthly Publication of Department of Computer Science, Federal University of Agriculture, Abeokuta. Vol 1. No.10. October 2020 Pp2.
12. **Olusegun Folorunso** Triple Helix: Essential to E-Government Master Plan, CSC Newsletter A monthly Publication of Department of Computer Science,

- Federal University of Agriculture, Abeokuta. Vol 1. No.10. October 2020 Pp2-3.
13. **Olusegun Folorunso** Rethinking Quality Assurance in Nigerian Universities, CSC Newsletter A monthly Publication of Department of Computer Science, Federal University of Agriculture, Abeokuta. Vol 1. No.11. December 2020 Pp1-2.
  14. **Olusegun Folorunso** Post Covid-19: Effective Strategies for Managing Virtual Classrooms, CSC Newsletter A monthly Publication of Department of Computer Science, Federal University of Agriculture, Abeokuta. Vol 1. No.12. December 2020 Pp1-2.
  15. **Olusegun Folorunso** New Normal: Knowledge-Building with 5E Instructional Model, CSC Newsletter A monthly Publication of Department of Computer Science, Federal University of Agriculture, Abeokuta. Vol 2. No.1. January 2021 Pp1-2.
  16. **Olusegun Folorunso** What Good Assessment Practice means in Higher Education, CSC Newsletter A monthly Publication of Department of Computer Science, Federal University of Agriculture, Abeokuta. Vol 2. No.2. February 2021 Pp1.

#### **10. MAJOR CONFERENCES ATTENDED**

- i. Regional Conference on Innovative Approaches to Funding Higher Education and Research in Africa organized by Association of Africa Universities (AAU) in collaboration with UNESCO and CAMES at Lome Togo - November, 2014
- ii. 15<sup>th</sup> Annual IEASA (International Education Association of South Africa): The Impact of Internationalization on the **Quality of Higher Education** - August, 2011
- iii. IREG-5 conference: The Academic Rankings: From popularity to Reliability and Relevance, Berlin-Germany - October, 2010

#### **11. INFORMATION ON FELLOWSHIP, MASTER'S PROJECTS AND PH.D. THESIS SUPERVISED:**

S/N	Title of Thesis M.Sc/Ph.D	Name of Student	Date/Year of Commencement	Completed/ Outgoing	Sole /Collaborative
1.	Similarity measure on E-assessment- A case study of spelling Error pattern matching	Raji- Lawal Hanaty (M.Sc/Ph.D.)	2015	On- going	Collaborative
2.	Fuzzy-Genetic Approach for Detecting Invisible Tasks in process Aware Information Systems	Ayo, Femi Emmanuel (M.Sc)	2014	Completed	Sole
3.	A Recommender System for trace Clustering in Process Aware Information Systems	Egbekoya Damilola (M.sc)	2014	Completed	Sole

4.	Risk- Aware Access Control in Process Aware Information Systems	Akinniyi Stellamaris (M.Sc)	2014	Completed	Sole
5.	A Predictive Model for Mobility Load Balancing in Long Term Evolution (LTE)	Awoseyi Ayomikun (M.Sc)	2014	Completed	Collaborative
6.	A Collaborative And Trust-Based Intrusion Detection System for Mobile AD HOC Network	Akinola, Oluwatoyin Charles (Ph.D)	2011	On- going	Collaborative
7.	A Dynamic Resource Provisioning for Database management System in Cloud Computing	Oyebode E. O (Ph.D)	2011	On- going	Collaborative
8.	An Optimized Channel allocation Scheme for Congestion Control in Mobile Networks	Ugege Peter Edemewe (Ph.D)	2011	On- going	Collaborative
9.	Effect of Block Sizes on Watermarked Images Using Discrete Cosine Transform	Agbaje, M.O. (M.Sc)	1999-2008	Completed	Collaborative
10.	An Improved Chaotic Encryption Scheme	Ayanlowo, K.A. (M.Sc)	2000-2008	Completed	Sole
11.	An Improved Algorithm for Transform-Based Image Compression	Vincent, O.R. (M.Sc)	2001-2005	Completed	Collaborative
12.	A Framework for Citizen-Centric E-Governmnet	Adegboye, A.J. (M.Sc)	2001-2010	Completed	Collaborative
13.	A Combined Biometric Systems Approach to users Authentication	Araromi, Olufunmilayo (M.Sc)	2001-2009	Completed	Collaborative
14.	Runtime Monitoring of Malicious Code in a Network	Ajayi, I.A. (M.Sc)	2001-2008	Completed	Collaborative
15.	Mining Frequent Max-Sequential Patterns from Customer's Portfolio-Database	Nehinbe, O.J. (M.Sc)	2001-2004	Completed	Collaborative
16.	An Improved Technique for Multi-Dimensional Constrained Gradient Mining	Elugbadebo, O.J. (M.Sc)	2001-2005	Completed	Collaborative
17.	A Neural Network-Based Intrusion Detection System	Akinola, O.C. (M.Sc)	2001-2010	Completed	Collaborative
18.	Improved Intravenous Fluid Rate Determination Using Fuzzy Logic	Alaran, M.A. (M.Sc)	2002-2010	Completed	Collaborative
19.	User Authentication In network security	Komolafe, P.B. (M.Sc)	2002-2010	Completed	Collaborative

20.	A Knowledge-Based Visual Analytics Query System	Bello, A.T. (M.Sc)	2002-2010	Completed	Sole
21.	A framework for Multidimensional Database	Adesina, K.K. (M.Sc)	2002- 2010	Completed	Collaborative
22.	A Cellular Neural Network-Based Model for Edge Detection	Babatunde, H.O. (M.Sc)	2002-2009	Completed	Sole
23.	An Efficient Pattern Growth Mining of closed Frequent Item Sets	Onashoga, A.S. (M.Sc)	2002-2004	Completed	Collaborative
24.	Multiple Startup Scheme for TCP	Oyeyinka, I.K. (Ph.D)	2002-2011	Completed	Collaborative
25.	Designing and Testing of an Expert System-based site security officer	Ikuomola, A.J. (M.Sc)	2002-2007	Completed	Collaborative
26.	Elliptic Curve Cryptosystems for Smart Cards	Adeosun, O.E. (M.Sc)	2002-2009	Completed	Sole
27.	Usability Evaluation of Passphrases over Password Authentication Schemes	Ayannuga, (Ph.D)	1999-2011	Completed	Sole
28.	A Secured Mobile Agent Framework for Network Management	Ajayi, O.B. (Ph.D)	2006-2010	Completed	Collaborative
29.	A Framework for Visualizing Detection of Failure in Simply Supported Reinforced Concrete Beam Structured	Yusuf, L.O. (M.Sc)	2006-2009	Completed	Sole
30.	A Combined Approach to Distributed Password Authenticated Key Exchange Protocol	Orunsolu, A.A. (M.Sc)	2007-2010	Completed	Collaborative

## 12. EXTRA CURRICULA ACTIVITIES

- i. Playing Table Tennis
- ii. Reading

## 13. REFEREES

- i. **Professor H.O.D Longe**  
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27-04-2021

.....  
**Signature**

.....  
**Date**

**Research focus and contributions to knowledge in Computer Science**

My contributions to knowledge in computer science were hinged on the models and principles of databases and information system, as well as artificial intelligence and information security. The need to store and retrieve information with ease is crucial to all areas of computer science, which in turn, prompted my research interest. However, an improved algorithm for mining Top-K frequent item set with minimum length-m in transaction databases was developed (See Paper 4) to effectively analyze large amount of data collected through daily transactions. Efforts were made to effectively utilize and minimize databases' operations in terms of easy access by the users (See Papers 9 and 26). A visualization tool was developed to assist students in learning database normalization process, which is usually very difficult in designing with free anomalies (See Paper 17). The application of database and information system on knowledge management and crowd sourcing was carried out to effectively manage knowledge discoveries (See Papers 10 and 36).

The comparison of sorting techniques was carried out to determine the best sorting techniques in information processing system (See Papers 2 and 19). In this paper, a novel method of factor analysis was used to confirm the critical factors responsible for efficient sorting in data management. The determination of optimal trust variables that contributed most in knowledge sharing using genetic algorithm was conducted in (Paper 46). A conceptual analysis and design of knowledge management system for 'ifa' divination using a randomized expert system was developed in (See Paper 10), an approach that promotes indigenous technology from an African perspective.

I have collaboratively elucidated a personalized information filtering algorithm for knowledge management systems (See Paper 24) and also worked on the quantification of minimal closure algorithm for impacting requirement changes on network performance (See Paper 22). However, the effective use of database management systems which have significant role to play in the field of computer science has also been collaboratively studied (See Papers 17, 26, 29, 31 and 33). A collaborative work has been done on knowledge management systems, with practical application of database systems (See papers 44, 53, 54 and 55) while collaborative studies were carried out on e-learning systems in Nigeria Universities (See Papers 8 and 47).

I have also worked on the combination of Trust-Based Access Control (TBAC) strategy and fuzzy expert system to enhance the quality of human computation in crowd-sourcing environment (See Paper 43). Further works on crowd-sourcing were discussed in (See Paper 41). Detailed studies and practices of artificial intelligence using mobile agents, data mining, neural networks, genetic algorithms in businesses, communications, databases, Health systems and education are discussed in (Papers 1, 7, 12, 20, 21, 23, 25, 38, 40, 42, 48, 50, 51 and 52).

It was discovered that the key factors affecting e-commerce are security, transaction flow control and network congestion. Collaborative works were done to overcome these problems (See Papers 3, 5, 11, 13, 15, 18, 27, 32, 35 and 37). A firefly algorithm-based credit card fraud detection framework for e-payment system was presented in Paper 45. The paper took into consideration, discrete optimization problems associated with the state of credit card holder's behaviour as transaction progresses. The novelty in this framework is that to the best of my knowledge firefly algorithm has never been used in detecting credit card frauds. The effect of using Huffman algorithms for encrypting ciphers with poly-alphabetic substitution cipher to produce a well-focused text document, produced a fast encryption with low computational time, is presented in Paper 6. Further works on information security using watermarking techniques, semi-global alignment algorithm for masquerade detection, preventing authentication systems from key logging attacks and the use of elliptic curve cryptography for improving e-payment security, were discussed in (Paper 14, 16, 22, 28, 30, 34, 49 and 56).

In line with the multi-disciplinary nature of computer science, I have collaborated with several scientists outside my immediate area of specialization within and outside my University and in which notable papers have been presented.