CURRICULUM VITAE

Dr. Idowu Ademola Osinuga

Department of Mathematics, College of Physical Sciences,
Federal University of Agriculture, Abeokuta, Nigeria.

01. PERSONAL

(i) Name in Full: OSINUGA Idowu Ademola.

(ii) Date of Birth: 11th August, 1970.

(iii) Place of Birth: Ode-Remo

(iv) Age: 51 years

(v) Sex: Male

(vi) Marital Status: Married

(vii) Nationality: Nigerian

(viii) Town and State of Origin: Ode Remo, Ogun State.

(ix) Contact Address: Department of Mathematics,

College of Physical Sciences (COLPHYS),

Federal University of Agriculture,

P.M.B. 2240, Abeokuta.

(x) Phone Number: +2348056233056

(xi) E-mail Address: osinugaia@funaab.edu.ng, <u>osinuga08@gmail.com</u>

(xii) Present Title & Post: Associate Professor

02. EDUCATIONAL BACKGROUND

(i) Educational Institutions Attended (with dates)

(a) Ansar-ud-deen Primary School, Ode Remo 1977 – 1982

(b) Ode-Remo High School, Ode Remo 1982 – 1985

(c) Christ Apostolic Grammar School, Iperu Remo 1985 – 1988

(d) Olabisi Onabanjo University (OOU), Ago Iwoye	1989 – 1994
(e) University of Ibadan, Ibadan	1997 – 2000
(f) Federal University of Agriculture, Abeokuta	1999 – 2002
(g) University of Ilorin, Ilorin	2001 – 2008
(ii) Academic and Professional Qualifications (with dates)	
(a) Primary Six School Leaving Certificate	1982
(b) West African School Certificate (WASC)	1988
(c) B.Sc. (Hons) Mathematics, Second Class Upper Division	1994
(d) M.Sc. Mathematics	2000
(e) PGD Computer Science, Distinction	2002
(f) Ph.D. Mathematics	2008

(iii) Prizes, Honours, Scholarship, National and International Recognitions:

- (a) 2021 IMU-Simons African Fellowship Program Grant, June 30, 2021
- (b) Open Arms Travel Fellowship (Africa region) to attend the International Congress of Mathematicians, Rio de Janeiro, Brazil (1-9, August, 2018), April 16, 2018
- (c) 2015 and 2016 TETFUND Conference Intervention Award, FUNAAB, August 2017

03. WORK EXPERIENCE.

(i) Previous Work Experience Outside the University System.

National College, Gbagada, Lagos State. Classroom Teacher on P.T.A. Appointment between May-July 1995.

(ii) University Teaching Experience:

(a) Teaching Experience at OOU, Ago-Iwoye

(b) Teaching Experience at FUNAAB					
(iv) Lecturer I	1 st October, 2007 - 28 th February, 2011				
(iii) Lecturer II	1^{st} October, $2004 - 30^{th}$ September, 2007				
(ii) Assistant Lecturer	8 th November, 2000 – 30 th September, 2004				
(i) Graduate Assistant	25 th September, 1995 - 7 th November, 2000				

(i) Senior Lecturer 1st March, 2011 – 30th September, 2015

(ii) Associate Professor 1st October, 2015 to date

Courses Taught in the Last Three Sessions

2016/2017

S/N	Course Code	Course Title	No of students	Contact Hours per week	No. of Lecturers	Contribution
1.	MTS 251	Intro. to Numerical Analysis	97	3	2	50%
2.	MTS 315	Ordinary Differential Equations II	66	3	1	100%
3.	MTS 363	Operations Research	125	3	1	100%
4.	MTS 831	Mathematical Methods I	03	3	1	100%
5.	MTS 466	Calculus of Variation	81	3	1	100%
6.	MTS 876	Convexity & Optimization	01	3	1	100%

2017/2018

S/N	Course Code	Course Title	No of students	Contact Hours per week	No. of Lecturers	Contribution
1.	MTS 101	Algebra	1158	3	6	16.67%
2.	MTS 363	Operations Research	61	3	1	100%
3.	MTS 201	Mathematical Foundation	407	3	3	33.33%
4.	MTS 102	Calculus and Trigonometry	1224	3	5	25%
5.	MTS 468	Optimization Theory	28	3	1	100%
6.	MTS 494	Entrepreneurship study for Mathematics students	58	3	7	20%
7.	MTS 831	Mathematical Methods I	24	3	2	50%
8.	MTS 877	Mathematical Optimization	02	3	1	100%
9.	MTS 876	Convexity & Optimization	02	3	1	100%

2018/2019 - Sabbatical leave at the Department of Mathematics, University of Lagos, Akoka

2019/2020

S/N	Course Code	Course Title	No. of students	Contact Hours per week	No. of Lecturers	Contribution
1.	MTS 103	Vector and Geometry	750	3	3	33.3%
2.	MTS 201	Mathematical Foundation	497	3	3	33.3%
2.	MTS 371	Operations Research	30	2	1	100%
3.	MTS 877	Mathematical Optimization	03	2	1	100%
4	MTS 875	Introduction to Optimization	01	3	1	100%
4.	MTS 104	Intro. to Mechanics	738	3	3	33.3%
5.	MTS 468	Optimization Theory	06	3	1	100%
6.	MTS 876	Convexity & Optimization	01	3	1	100%

(c) Supervised Students' Projects B.Sc. Supervision

- i. 2011/2012 session: supervised five (5) final year students' projects
- ii. 2012/2013 session: supervised five (5) final year students' projects
- iii. 2013/2014 session: supervised six (6) final year students' projects
- iv. 2014/2015 session: supervised six (6) final year students' projects
- v. 2015/2016 session: supervised four (4) final year students' projects
- vi. 2016/2017 session: supervised four (4) final year students' projects
- vii. 2017/2018 session: supervising four (4) final year students' projects viii 2018/2019 Sabbatical leave
- VIII 2010/2017 Sabbatical leave
- ix 2019/2020 session: supervising three (3) final year students' projects

04. SPECIAL ASSIGNMENTS / COMMUNITY SERVICE

(a) Special Assignments in University

At Olabisi Onabanjo Univesity, Ago-Iwoye

(i)	Programme Coordinator (Diploma in Data Processing)	2006 to 2008.
(ii)	Departmental Coordinator (Postgraduate Studies)	2008 to 2010
(iii)	Member, Faculty Postgraduate Committee	2008 to 2010.

(iv) Co-ordinator, Pre-Degree Science Programme Feb.2010 to Feb. 2011

At Federal University of Agriculture, Abeokuta (FUNAAB)

(1) COLPHYS Representative, Board of College of Animal Science and Livestock Production (COLANIM)

May 2021 to date

(2)	Departmental Representative, College Board of Studies	May 22, 2018 – March 1, 2019
(3)	Member, Departmental Paper Work Committee on NUC	C Accreditation 2018 - 2019
(3)	Acting Head, Department of Mathematics J	an 2, 2016 – Jan 1, 2018
(4)	Member, COLPHYS Board of Studies J	an 2, 2016 – Jan 1, 2018
(5)	Member, College Promotion Assessment Panel J	an 2, 2016 – Jan 1, 2018
(6)	Member, University Senate	Jan 2, 2016 – Jan 1, 2018
		Jan 2, 2016 – Jan 1, 2018
(8)	Chairman, Departmental DTLC Committee	August 2015 – January 2016
(9)	Member, COLPHYS COCER	2015 – January 2016
(10)	Member, College Board of Physical Sciences (COLPHY	(S) Jan 2015 till date
(11)	Member, Space Allocation and Environmental Comm.,	COLPHYS 2015 till date
(12)	Member, COLPHYS Postgraduate Committee	2015 - 2018
(13)	COLPHYS Representative, COBFAS	2015 - 2017
(14)	Level Adviser, MTS 400L and FNG students	2014/2015 session
(15)	Departmental Postgraduate Studies Coordinator	2012 -2016.
(16)	Member, College of Natural Sciences (COLNAS) Board	March 2011 – Jan 2015.
(17)	Chairman, Departmental Paper Work Committee on NU	C Accreditation
		2012 - 2014.
(18)	Member, COLNAS Postgraduate Committee	2012 -2014.
(19)	Departmental Representative, Centre for Innovation and	Strategy in Learning and
	Teaching (CISLT)	2012 -2014.
(20)	COLNAS Representative, SIWES Committee	2012 - 2015
(21)	Coordinator MTS 102,	2010/2011 session
(22)	Coordinator MTS 101, 242,	2011/2012 session
(23)	Coordinator MTS 101,102,	2012/2013 session
(24)	Coordinator MTS 105,	2013/2014 session
(25)	Level Adviser, MTS 400L and FNG students	2011/2012 session
(26)	Level Adviser for MTS 100L students	2013/2014 session
(27)	Level Adviser to 300 Students	2019/2020 session

Services outside the University

- (i) Visiting Associate Professor, Department of Mathematics, University of Lagos, Akoka-Yaba, Lagos State March 1, 2019 – February 28, 2020
- (ii) Invited Lecturer, 6th Annual International Conference on Mathematical Analysis and Optimization: Theory and Applications (ICAPTA 2019), National Mathematical Centre, Abuja, Nigeria, 25 29 March, 2019.
- (iii) Invited Reviewer, Refereed Proceedings, 18th International Conference on Mathematical Optimization Theory and Operations Research (MOTOR 2019), Ekaterinburg, Russia, July 8-12, 2019; DOI:10.1007/978-3-030-22629-9
- (iv) External Examiner, Master of Science Degree Programme, Department of Mathematics, Universiti Malaysia Terengganu, Terengganu, Malaysia, 4th June, 2013 till date
- (v) External Examiner, Master of Science Degree Programme, Olabisi Onabanjo University, Ago-Iwoye, 27th November, 2015 till date
- (vi) External Examiner, Ph. D. programme, University of Lagos, Akoka,

- (vii) Reviewer to many national and foreign journals, including the following:
 - Malaysian Journal of Applied Sciences
 - African Journal of Science and Nature, OOU, Ago-Iwoye
 - Filomat, University of Nis, Serbia
 - Journal of Nigerian Mathematical Society
 - International Journal of Mathematical Analysis and Optimization.
 - Informatica An International Journal of Computing and Informatics
 - Kybernetes, Emerald Publishing Limited, UK
 - Journal of Natural Sciences, Eng. and Tech. (Formerly ASSET An International Journal (Series B))
- (vii) Special Issue Lead Organizer, Advances and Trends in Optimization Theory and Applications (for the Journal WSEAS Transactions on Mathematics), April 2020.

(b) National/Community Service

- (i) Secretary, Education and Technology Directorate, Remo Growth and Development Foundation, 2018 till date.
- (ii) President, Olabisi Onabanjo University Muslim Alumni, June 6, 2020 till date
- (iii) Volunteer, Oxfam Nigeria (an affiliate of Oxfam International a global charitable organization fighting inequality of poverty) August 2020 till date
- (iv) Chairman, Management Board, Ansar-ud-deen Model College, Ijebu-Igbo, 23rd September, 2012 till date
- (v) Supervisor, Joint Admissions and Matriculation Board (JAMB), College of Education, Foreign Links Campus, Moro, Ile-Ife, Osun State, June 19 July 4, 2021

05. TRAINING PROGRAMME ATTENDED (with dates):

(a) Capacity Building Training Workshops

- (1) 2017 Capacity Building Workshop for Deans of Colleges, Directors of Academic Centres and Heads of Departments, International Scholars & Resource Centre, Federal University of Agriculture, Abeokuta, 26 27 October, 2017.
- (2) 2nd Annual Science, Technology, Engineering, and Mathematics (STEM) Education Workshop, The SAMSA-MASAMU program, organized by the Department of Mathematics, University of Dar es Salaam at the Palace Hotel, Arusha, Tanzania, 22nd November, 2017.

(b) Brief Extension Activities:

1. **Guest** on FUNAAB FM 89.5 radio programme "SCIENCE WORLD" featuring on an enlightenment programme titled "Exploring the World of Mathematics" June 22, 2018.

06. COMMENDATION: Nil

07. MEMBERSHIP OF PROFESSIONAL BODIES:

- i. Nigerian Mathematical Society (NMS)
- iii. Society for Industrial and Applied Mathematics (SIAM)
- iv. SIAM Activity Group on Optimization (SIAG-OPT)

08. RESEARCH INTEREST OR COMMISSIONED PROJECTS

Research Interests: Optimization Theory, Operations Research, Intelligence systems and Applications of optimization techniques in machine learning problems.

(a) Research Completed:

- (1) Broyden-like methods for the solution of nonlinear systems of equations
- (2) Hybrid Broyden-CG methods for unconstrained optimization problems

(b) Research in Progress

- (1) Fermat-Torrricelli and Weber problems in locally convex spaces
- (2) A double-step length method for solving systems of nonlinear systems of equations
- (3) Development of hybrid conjugate gradient methods for large-scale optimization

(c) Project(s) in progress

Development of an intelligent system for evaluating quality of experience of end-users on telecommunication Web services

(d) Collaborations in and outside Nigeria

- Optimization Theory and Approximation, particularly minimization of norm using modified Weirstrass theorem, duality and coercivity principles,
 Collaborators: C. R. Nwozo (UI, Ibadan); O. M. Bamigbola (Unilorin, Ilorin); O. R. Oniyide (UMUC, Maryland, USA); H. Gunawan (ITB, Bandung, Indonesia); S. A. Ayinde (BU, Ilishan) and colleagues in the Departments of Physics and Mathematics in FUNAAB.
- Mathematical Programming, particularly modeling of travelling distances in Weber location Problem using different and special class of Lp metrics and development of algorithmic solution to practical problems, Collaborators: P. S. Stanimirovic and Marija S. Ciric (Unis, Republic of Serbia); Lev A. Kazakovtsev, Mikhail N. Gudyma and Alexander N. Antamoshkin (SSAU, Krasnoyarsk, Russia); Absalom E. Ezugwu (UKZN, KwaZulu-Natal, South Africa); Micheal O. Olusanya (DUT, Durban, South Africa).
- Operations Research/ Computational Mathematics, particularly in the developments of methods for the solution of game, cache replacement and vector optimization problems, Collaborators: D. A. Agunbiade, T. J. Odule, T. O. Olatayo and W. O. Otun (OOU, Ago-Iwoye); J. A. Osilagun (Unilag, Akoka); O. J. Adeleke (RUN, Ede); O. O. Okundalaye (AAU, Akungba-Akoko)
- Intelligent Systems and Applications of optimization techniques to machine learning problems, **Collaborators:** Several Colleagues in the Departments of Mathematics, Physics and Computer Science of FUNAAB.

09. PUBLICATIONS:

(i) Theses / Dissertations:

- 1. **Osinuga, I. A.** (1994): Computation of Eigenvalues (with its application), Unpublished B.Sc. Project, Olabisi Onabanjo University, Ago-Iwoye.
- 2. **Osinuga, I. A. (2000):** On Lp Bound Lipschitzian Optimization Unpublished M.Sc. Dissertation, University of Ibadan, Ibadan, Nigeria.
- 3. **Osinuga, I. A.** (2002): Problems Associated with Configuration and Troubleshooting of PCs Unpublished PGD (Computer Sc.) Dissertation, Federal University of Agriculture, Abeokuta, Nigeria.
- 4. **Osinuga, I. A. (2008):** Global Optimization on Banach Spaces Unpublished Ph.D. Thesis, University of Ilorin, Ilorin, Nigeria.

(ii) Articles in Learned Journals

- Osinuga, I. A. and Nwozo, C. R. (2003): On Lp Bound Lipchitzian Optimization, ABACUS – The Journal of Mathematical Association of Nigeria, 30 (2b); 246-254.
- 2. **Osinuga, I. A.** and Bamigbola, O. M. (2004): On Global Optimization for Convex Problems on Abstract Spaces, *ABACUS The Journal of Mathematical Association of Nigeria*, 31 (2a); 94-98.
- 3. Oniyide, O. R and **Osinuga, I. A.** (2006): On the Existence of Best Sample in Simple Random Sampling, **ABACUS The Journal of Mathematical Association of Nigeria**, 33 (2b); 290-294.
- 4. Osinuga, I. A. and Bamigbola, O. M. (2007): On the Minimum Norm Solution to Weber Problem, *African Journal of Educational Studies in Mathematics and Sciences*, 5; 29-34.
- 5. **Osinuga, I. A.** (2007): Further Results on the Classes of Convex Functions, *Journal Nigerian Association of Mathematical Physics*, 11; 515-518.
- 6. Oniyide, O. R., **Osinuga, I. A.** and Olatayo, O. O. (2008): An Improved Cutting Plane Algorithm for Vector Optimization Problem, *African Journal of Pure and Applied Sciences*, 1 (1); 46-51.
- 7. **Osinuga, I. A.** and Bamigbola, O. M. (2008): On Some Optimality Conditions for Unconstrained Optimization in Reflexive Banach Spaces, *African Journal of Pure and Applied Sciences*, 1 (2); 33 35.
- 8. **Osinuga, I. A.** and Osilagun, J. A. (2008): Comparison of Three Variant of Simplex Methods in Solving Game Theory Problem, *IFE Journal of Science*, 10 (1); 371-377.
- 9. Bamigbola, O. M. and **Osinuga, I. A.** (2009): Resolution of Extremization Problem using Duality Principle, *Journal of Natural Sciences, Engineering and Technology*, Series B, 8 (1); 16 24.

- 10. **Osinuga, I. A.** and Oniyide, O. R. (2010): An Overview of Norm Approximation Applications, *Far East Journal of Mathematical Sciences*, 43 (2); 189 202.
- 11. **Osinuga, I. A.** and Adekoya, A. O. (2011): A Fuzzy Approach to Decision Making Process in Performance Appraisal, *Nigerian Journal of Operations Research*, 2 (1); 129 -146.
- 12. Stanimirovic, P. S., Ciric, M. S., Kazakovtsev, L. A. and **Osinuga, I. A.** (2012): Single-Facility Weber Location Problem based on the Lift Metric. *Facta Universitatis: Series Mathematics & Informatics*, 27 (2); 175 190, Available online at http://facta.junis.ni.ac.rs/mai/mai2702/fumi2702_04.pdf.
- 13. Odule, T. J. and **Osinuga, I. A.** (2013): Dynamically Self-adjusting Cache Replacement Algorithm. *International Journal of Future Generation Communication and Networking*, 6 (1); 25-34, Available online at http://www.sersc.org/journals/IJFGCN/vol6_no1/3.pdf.
- 14. Osinuga, I. A., Kazakovtsev, L. A. and Stanimirovic, P. S. (2013). Planar Weber Location Problem with French Metro Metric, Review Bulletin Calcutta Mathematical Society, 21 (1); 7-20.
- 15. Kazakovtsev, L. A., Stanimirovic, P. S., **Osinuga, I. A.**, Gudyma, M. N. and Antamoshkin, A. N. (2014). Algorithms for location problems based on angular distances. *Advances in Operations Research*, 2014; 1-12, (Art. ID 701267). Available online at https://dx.doi.org/10.1155/2014/701267. MR 3266302
- 16. **Osinuga, I. A.** and Akinleye, S. A. (2015). Further Results on Some Properties of Special Metrics in Location Optimization Problems. *Journal Nigerian Association of Mathematical Physics*, 29; 11-20.
- 17. **Osinuga, I. A.**, Stanimirovic, P. S., Kazakovtsev, L. A. and Akinleye, S. A. (2015): A modeling framework on distance predicting functions for location models on continuous space. *Facta Universitatis: Series Mathematics and Informatics*, 30 (4); 419-443, Available online at http://casopini.junis.ni.ac.rs/index.php/FUMathInf/article/view/1115.
- 18. **Osinuga, I. A.** and Yusuff, S. O. (2017), Construction of a Broyden-like method for nonlinear systems of equations. *Anale. Seria Informatica*, 15 (2); 128 –135, Available online at <u>anale-informatica.tibiscus.ro</u>
- 19. Adeleke, O. J. and **Osinuga, I. A.** (2018), A five-term hybrid conjugate gradient method with global convergence and descent properties for unconstrained optimization problems. *Asian Journal of Scientific Research*, 11 (2); 185 -194.
- 20. **Osinuga, I. A.** and Yusuff, S. O. (2018), Quadrature based Broyden-like method for systems of nonlinear equations. *Statistics, Optimization and Information Computing*, 6 (1); 130 -138.
- 21. **Osinuga, I. A.**, Olofin, I. O. and Okundalaye, O. O. (2018), Numerical Experiments of Search Direction Parameter in BFGS-CG Algorithm. *Journal of Nigerian Association of Mathematical Physics*, 45 (1); 43–52.

- 22. Osinuga, I. A. and Olofin, I. O. (2018), Extended hybrid conjugate gradient method for unconstrained optimization. *Journal of Computer Science and its Applications*, 25 (2); 166–175.
- 23. **Osinuga, I. A.** and Olofin, I. O. (2018) Function minimization by variants of BFGS-CG method. *Confluence Journal of Pure and Applied Sciences*, 2 (2); 130-138.
- 24. Osinuga, I. A. and Yusuff, S. O. (2018) A robust Broyden-like method for systems of nonlinear equations. *Transactions of the Nigerian Association of Mathematical Physics*, 6, 81-86.
- 25. Yusuff, S. O., **Osinuga, I. A.**, Adeniran, O. J. and Onashoga, S. A. (2019), Robust three-step Broyden-like algorithms for function of several variables. *Anale. Seria Informatica*, 17 (2); 255-260, Available online at anale-informatica.tibiscus.ro
- 26. Onashoga, S. A., Sodiya, A. S. and **Osinuga, I. A.** (2019): Privacy preserving location-based client-server service using standard cryptosystem. *Journal of Computing and Information Technology*, 27 (4); 47-63, Available online at https://hrcak.srce.hr/file/349496.
- **27 Osinuga, I. A.**, Oyebade, V. O. and Otun, W. O. (2020): Integrated technique for the optimization of healthcare facility problem. *International Journal of Applied Operational Research*, 10 (1); 11-20. Available online at http://ijorlu.liau.ac.ir/article-1-606-en.pdf.
- 28. **Osinuga, I. A.** and Ologun, O. E. (2020): Optimization of vehicular traffic congestion at signalized intersection. *International Journal of Operations Research (Taichung)*, 17 (2); 1-7, Available online at www.orstw.org.tw
- 29. **Osinuga, I. A.** and Nwodo, Y. N. (2020): Another conjugate gradient algorithm based on spectral scaled memoryless BFGS update. *International Journal of Computer Applications*, 176 (35); 40 45. Available online at DOI: 10.5120/ijca2020920440
- 30. Adeleke, O. J., Ezugwu, A. E.-S. and **Osinuga, I. A.** (2021): A new family of hybrid of conjugate gradient methods for unconstrained optimization *Statistics, Optimization and Information Computing*, 9; 399-417, Available online at: www.iapress.org.
- 31. Ayo, F. E., Folorunso, O., Ibharalu, F. T. and **Osinuga, I. A.** (2020) Machine learning techniques for hate speech classification of twitter data: State-of-theart, future challenges and research directions, *Computer Science Review*, 38, 100311; DOI:10.1016/j.cosrev.2020.100311
- 32. Ayo, F. E., Folorunso, O., Ibharalu, F. T. and **Osinuga, I. A.** (2020) Hate speech detection in Twitter using hybrid embeddings and improved cuckoo search-based neural networks, *International Journal of Intelligent Computing and Cybernetics*, 13 (4), 485-525. DOI:10.1108/IJICC-06-2020-0061

- 33. **Osinuga, I. A.**, Ayinde, S. A., Oguntuase, J. A. and Adebayo, G. A. (2020): On Fermat-Torricelli problem in Frechet spaces, *Journal of Nepal Mathematical Society*, 3 (2), 16 26; https://doi.org/10.3126/jnms.v3i2.33956
- 34. Ayo, F. E., Folorunso, O., Ibharalu, F. T., **Osinuga, I. A.** and Abayomi-Alli, A. (2021): A probabilistic clustering model for hate speech classification in twitter, *Expert System with Applications*, 174, 114761; DOI:10.1016/j.eswa.2021.114761
- 35. Dada, I. D., Akinwale, A. T., Onashoga, S. A. and **Osinuga, I. A.** (2021): An improved gradient descent method for optimization of supervised learning problems, *International Journal of Computer Applications*, 183 (20), 39 45.

(ii) Papers already accepted for publications:

36. Adeleke, O.J., Osinuga, I. A. and Raji, A. (2021): A globally convergent hybrid FR-PRP conjugate gradient method for unconstrained optimization problems, *WSEAS Transactions on Mathematics*, To appear

(iii) **Book(s):**

37. Liadi, M. A. and **Osinuga, I. A.** (2011): *A First Course in Mathematical Methods for Scientists and Engineers* (ISBN 978-978-50192-8-5), 197 pp. Ibadan: Published by Rasmed Publications (Nig.).

(iv) Papers in Edited Conference Proceedings

- 38. Bamigbola, O. M. and **Osinuga, I. A.** (2003): Resolution of Extremization Problem using Duality Principle, *Proceedings African Mathematical Union-International Conference of Mathematical Scientists (AMU-ICMS)*, *Abeokuta, Nigeria, A.* R. T. Solarin and A. U. Afuwape (Eds.), 205-213.
- 39. **Osinuga, I. A.** and Bamigbola, O. M. (2007): On the Minimum Norm Solution to Weber's Problem, *Proceedings 25th Annual Conference of Southern Africa Mathematical Sciences Association (SAMSA), Windhoek, Namibia*, Conference Editorial Board (Eds.) 2; 55-60, Available online at www.samsajournal.org/ejournal/proceedings2008/p50-p60Sosi.pdf
- Osinuga, I. A. and Kazakovtsev, L. A. (2014): A Problem in Classification Scheme of Location Models. *Proceedings of the International Conference on Problems of Modern Agrarian Science*, Russia. Tsuglenok, N. V., M. Fosner and O. I. Antamoshkina (Eds.), 65-68, Available online at http://kgau.ru/new/all/konferenc/konferenc/2014/e3.pdf.
- 41. S. A. Ayinde and **Osinuga, I. A.** (2019) Facility Location Problem in Pre-inner Product Spaces. *Proceedings 6th International Conference on Mathematical Analysis and Optimization: Theory and Applications (ICAPTA 2019*), Conference Editorial Board (Eds.). 611- 623, Available online at icapta.unilag.edu.ng/proceedings/2019
- 42. **Osinuga, I. A.,** Bolarinwa, A. A. and Kazakovtsev, L. A. (2019): A Modified Particle Swarm Optimization Algorithm for Location Problem, *IOP Conference Series: Materials Science and Engineering*, Conference Editorial

Board (Eds.), 537 (4); 1-6, Available online at doi:10.1088/1757-899X/537/4/042060/pdf.

- 43. Adeleke, O. J., Olusanya, M. O. and **Osinuga, I. A.** (2019): A PRP-HS type hybrid nonlinear conjugate gradient method for solving unconstrained optimization problems. In Intelligent Systems Applications in Software Engineering. CoMeSySo 2019. *Advances in Intelligent Systems and Computing*, Silhavy, R., Silhavy, P. and Prokopova, Z. (eds.), 1046, 58-68, Cham (Germany): Available online at https://doi.org/10.1007/978-3-030-30329-7_6.
- (v) **Technical Reports:** Nil

10. MAJOR CONFERENCES ATTENDED WITH PAPERS READ

- i. 9th International Workshop on Mathematical Models and their Applications (IWMMA 2020), Krasnoyarsk, Russia (virtual), 16-18 November, 2020
 Paper read: Existence results on Fermat-Torricelli problem in Frechet spaces
- ii. 38th Annual Conference of Nigerian Mathematical Society, University of Nigeria, Nsukka, Nigeria, 18 21 June, 2019.
- iii. Invited Speaker 6th Annual Conference & Workshop on Mathematical Analysis and Optimization: Theory and Applications (ICAPTA 2019), National Mathematical Centre, Abuja, Nigeria, 24 29 March, 2019.
- iv. International Congress of Mathematicians (ICM 2018), Riocentro Convention Center, Rio de Janeiro, Brazil, 1 9, August, 2018.
 Poster Presentation: On some applications of conjugate gradient methods to constrained optimization problems
- v. 37th Annual Conference of Nigerian Mathematical Society, Bayero University, Kano, Nigeria, 8 11 May, 2018.

 Paper read: *Variants of Broyden-like method for Systems of Nonlinear Equations*
- vi. 35th Annual Conference of Southern Africa Mathematical Sciences Association (SAMSA) organized by the Department of Mathematics, The University of Dar es Salaam (UDSM), held on 20 23 November, 2017 at the Lush Garden Hotel, Arusha, Tanzania.

 Paper read: Computational experiments on BFGS-CG methods for unconstrained optimization
- vii. International Conference on Contemporary Mathematics and the Real World (in honour of our Distinguished Mathematics Scholar Prof. G. O. S. Ekhaguere on his 70th Birthday Anniversary), University of Ibadan, Ibadan, Oyo State, Nigeria, 22 25 May, 2017.

 Paper read: *A robust Broyden-like method for systems of nonlinear equations*
- viii. Cape Verde International Days on Mathematics (CVIM 2017), University of Cape Verde, Palmarejo Campus, Praia, Cape Verde, 8 -11 May, 2017. Paper read: *Quadrature based Broyden-like Method for Systems of*

- ix. 3rd Annual International Workshop on Mathematical Analysis and Optimization: Theory and Applications (ICAPTA 2016), University of Lagos, Akoka, Nigeria, 6 10 March, 2016.
- x. 35th Annual Conference of Nigerian Mathematical Society, Federal University of Technology, Minna, Nigeria, 8 11 May, 2016.
- xi. 2nd Annual International Conference and Workshop on Mathematical Analysis and Optimization: Theory and Applications (ICAPTA 2015), University of Lagos, Akoka, Nigeria, 19 25, March, 2015.
- xii. 1st Annual Conference on Mathematical Analysis and Optimization: Theory and Applications (ICAPTA 2014), University of Lagos, Akoka, Nigeria, 12 14 March, 2014.
 - Paper Read: Location of fire service station using Fermat-Weber concept
- xiii. 32nd Annual Conference of the Nigerian Mathematical Society, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria, 25-28 June, 2013.
- xiv. International Conference on Frontiers of Mathematical Sciences with Applications (ICFMSA 2012) organized by the Calcutta Mathematical Society, Asutosh Bavan, Salt Lake City, Kolkata, West Bengal, India, 7 9 December, 2012.
 - Paper Read: Planar Weber location Problem with French Metro Metric
- xv. ICTP/ESTECO Training Workshop on "Open Source (incl. Design Optimization) and the Internet for Building Global Scientific Communities", ICTP Trieste, Italy, 28 November 16 December, 2011.

 Paper read: Optimization with Multiple Objectives: Emerging Trends and Applications.
- xvi. 3rd International Conference on Statistical Sciences, University of the Punjab, Quiad-e-Azam Campus, Lahore, Pakistan, 25 27 November, 2010. Paper read: *A note on convex programming in optimal design and location theory*
- xvii. ICTP-SDU Training Workshop on "Scientific Information in the Digital age: Access and Dissemination", ICTP Trieste, Italy, 12 16 October, 2009.
- xviii. 26th Southern Africa Mathematical Sciences Association (SAMSA) Conference, Eduardo Mondlane University, Maputo, Mozambique, 25 28 November, 2008.
- xix. 26th Annual Conference of Nigerian Mathematical Society (NMS) held at Federal University of Technology, Akure, Ondo State, 15-19 May, 2007. Paper read: *An overview of norm approximation applications*
- xx. 24th Annual Conference of Nigerian Mathematical Society, Olabisi Onabanjo University, Ago-Iwoye, Nigeria, April 2005.
- xxi. African Mathematical Union and International Conference of Mathematical

Scientists, Federal University of Agriculture, Abeokuta, Nigeria, $16^{th} - 22^{nd}$ November, 2003.

Paper read: Resolution of extremization problem using duality principle

11. INFORMATION ON FELLOWSHIP, MASTER'S PROJECTS AND Ph.D. THESES SUPERVISED

(a) Fellowships and Visiting Positions:

- (1) Visiting Associate Professor, Department of Mathematics, University of Lagos, Akoka-Yaba, Lagos, March 1, 2019 February 28, 2020
- (2) IMU-Simons African Fellowship Program Grant (Research stay tenable at the University of Nis, Serbia, February- March, 2022)

 June 30, 2021

(b) Information on Master's Projects and Ph.D. Theses Supervised:

Ph.D. Theses (completed):

S/No	Name of Student	Title of Thesis	Supervision	Date Completed	Degree in View
1.	Ayinde, Semiu Akinpelu PG 16/0227	Generalized Fermat- Torricelli and Weber Problems in Locally Convex Spaces	Major	September 14, 2021	Ph.D. Mathematics
2.	Akinbo, Bayo Johnson PG 16/0663	Convective heat and mass transfer in a Walters' B fluid over a stretching sheet	Co- supervision	August, 2021	Ph.D. Mathematics
3.	Ayo, Femi Emmanuel PG 13/0203	A probabilistic clustering model for hate speech classification in microblogs	Co- supervision	May 28, 2021	Ph.D. Computer Science
4.	Adeleke, Olawale Joshua PG 14/0834	Some Hybrid Conjugate Gradient methods and Application in Constrained Optimization	Major	February 17, 2020	Ph.D. Mathematics
5.	Adams, Daniel Olusegun PG 09/0126	Boundedness and stability criteria for a class of second order nonlinear ordinary differential	Co- supervision	December 5, 2019	Ph.D. Mathematics

equations with		
delay		

Ph.D. Theses (in progress):

S/No	Title of Thesis	Name of	Date/ Year of	Completed/	Supervision	Degree in
		Student	Commencem	On-going		View
			ent			
1.	Application of	Jokojeje,	2015	On-going	Co-	Ph.D.
	eigenvalue approach	Rufus A.			supervision	Eletrical &
	for dynamic stability	PG 10/0193				Eletronics
	assessment of an					Engineering
	interconnected power					
	using Nigeria 330KV					
	28-bus power system					
	network					
2.	Investigation on the	Ogunyemi,	2015	On-going	Awaiting	Ph.D.
	effects of Nonlinear	Joel			oral defense	Electrical &
	Loads on Power	PG 09/0166				Electronics
	Quality in Ilaro					Engineering
	Power Distribution					
	Network					

M.Sc. Dissertations (Completed)

S/N	Name of Candidate	Dissertation Title	Supervision	Date Completed	Degree- in- View
1.	Nwodo, Njideka Yvonne	A scaled conjugate gradient method for unconstrained optimization problems	Major	September 15, 2021	MSc Mathema tics
2.	Ogunsola, Iskeel A.	A new transmuted Exponential distribution	Co- supervision	September 2, 2021	MSc Statistics
3.	Dada, Ibidapo Dare	Improved gradient descent method for optimization of supervised machine learning problems	Co- supervision	August 12, 2012	MSc Computer Science
4.	Kassim, Moriam Adeyemi	An enhanced handover scheme based on fixed mobility pattern in long term evolution	Co- supervision	April, 2021	MSc Computer Science
5.	Oguntolu, Opeoluwa Stephen	An improved strata boundaries determination method in stratified sampling	Co- supervision	April 22, 2021	MSc. Statistics
6.	Oyekunle, Kazeem	A modified	Co-	March 23,	MSc.

	Adekunle	calibration approach	supervision	2021	Statistics
		for ratio estimator in			
7.	A dayyama Danlya	stratified sampling A modified estimator	Co-	Eshmany 25	M.Sc.
7.	Adeyemo, Ronke Gbemisola	for quartile ranked set sampling	supervision	February 25, 2021	Statistics
8.	Ashani, Timothy Mitonji	Optimized phase and thermoelectric properties of CuSbS ₂ (chacolstibite) solar cell applications using first-principle calculations.	Co- supervision	February 23, 2021	M.Sc. Physics
9.	Bolarinwa, Abideen Ademola	A modified particle swarm optimization algorithm for single facility Weber location problems	Major	February 18, 2020	M.Sc. Mathema tics
10.	Noah, Nureni Olusola	A Bat Neural Network Based Channel Estimation in OFDM System	Co- supervision	December 27, 2019	M.Sc. Computer Science
11.	Adekpe, Daniel O.	Jackknife Approaches for Error Reduction in Stratified Cluster Sampling	Co- supervision	March 11, 2019	M.Sc. Statistics
12.	Olofin, Iyiola Oluwaseun	Modified and Extended Hybrid Broyden-conjugate gradient methods for unconstrained Optimization Problems	Major	February 1, 2018	M.Sc. Mathema tics
13.	Yusuff, Saidat Olaide	On Broyden-like methods for High Dimensional Systems of Nonlinear Equations	Major	February 1, 2018	M.Sc. Mathema tics
14.	Sohe, Elizabeth Mautin	A Stratified Randomized Response Techniques for Collecting Information on Sensitive Characteristics	Co- supervision	November 13, 2017	M.Sc. Statistics
15.	Ayo, Femi Emmanuel	An enhanced genetic mining model for detecting incompleteness in process aware information systems	Co- supervision	September 5, 2016	M.Sc. Computer Science

M.Sc. Dissertations (in progress)

S/No	Title of Thesis	Name of Student	Date / Year of Commencement	Completed/Ongoing	Sole / Collaboration Supervision
1.	Construction of new conjugate gradient method using DFP update (proposed).	Olubiyi, Moses Oluwasegun PG 17/0591	2017	On-going	Major
2.	Picard-Ishikawa iterative processes for unconstrained optimization (proposed)	Oyaosho, Rahmon Ayomide PG 17/0592	2017	On-going	Major

12. EXTRA CURRICULA ACTIVITIES:

- Reading, Jogging and listening to news.

13. REFEREES

1. Prof. O. M. Bamigbola

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University of Ilorin, Ilorin, Kwara State, Nigeria.

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Ogun State, Nigeria.

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Ogun State, Nigeria

E-mail: <u>oaakin@yahoo.com</u> Phone No: +2348030824063

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Signature	Date