

SUMMARY SHEET

A. J. RODRIGUES

B.Sc. (1967) Electrical Engineering

M.Sc. (1969) Automatic Control Theory and Practice

Ph.D. (1971) Mathematics of Computing/Numerical Analysis

Lecturer: Jan. 1972 - June 1974	Makerere University:	Engineering
Lecturer: Jan. 1972 - April 1979	Univ. of Nairobi:	Mathematics
Senior Lecturer: April 1979 - April 1989	Univ. of Nairobi:	Mathematics
Director, Sept 1985 to Oct 1994	Univ. of Nairobi	Institute of Computer Science:
Associate Professor: May 1989– Aug. 1997	Univ of Nairobi	Computer Science
Professor: August 1997 - Aug. 2001	Univ. of Mauritius	Computer Science
Director, February 1998 to August 2001	Univ. of Mauritius:	Centre for Information Technology & Systems,
Professor: Sept 2001—August 2010:	Univ of Nairobi	Computer Science
Professor: August 2010 -- to date (post retirement contract since 19/5/2015)	BUC/JOOUST	Sch. Informatics & Innovative Systems.
Director, September 2010-to date	BUC/JOOUST	ICT Directorate

Date: 27 March 2022

CURRICULUM VITAE

NAME: RODRIGUES Anthony Joachim
NATIONALITY: Kenyan
I.D No **13060211**
COUNTRY OF RESIDENCE: Kenya
DATE OF BIRTH: 19 May 1945, Jinja, Uganda
MARITAL STATUS: Single
CURRENT ADDRESS: Directorate, ICT., Jaramogi Oginga Odinga University of Science & Technology, P.O. Box 210-40601, Bondo, Kenya
TELEPHONE OFFICE: (254)(057) 2501804,
MOBILE **+254 733969869:**
FAX: (254)(057) 2523851
EMAIL: tonyaniceto@gmail.com,
tonyr@jooust.ac.ke

SCHOOLS ATTENDED:

1952 - 1958: St. Mary's High School, Bombay, India.
1959 - 1963: St. Mary's College, Kisubi, Uganda

CERTIFICATES:

1961 Cambridge School Certificate, 1st Grade (Aggregate 10 points)
1963 Cambridge Higher School Certificate, Physics A, Chemistry B, Mathematics C.

SCHOLARSHIPS:

1964 - 1965 - Special Commonwealth Assistance to African Plan (S.C.A.A.P) Fellowship;
1965 - 1971 - Commonwealth Scholarship

UNIVERSITY ATTENDED:

The Victoria University of Manchester 1964 - 1967
The University of Manchester Institute of Science and Technology (1967-1971).

DEGREES:

1967 - **BSc.** (Hons) Lower Second in Electrical Engineering;
1969 - **M.Sc.** Theory and Practice of Automatic Control by Coursework (distinction) and Dissertation;
1971 - **Ph.D.** Thesis "Numerical Inversion of Laplace Transforms," in the field of Numerical Analysis/Scientific Computation/Approximation Theory.

EMPLOYMENT:

Jan 1972 - March 1974 Lecturer in Engineering Mathematics, Faculty of Technology, Makerere University, P.O. Box 7062, Kampala, Uganda.
July 1974 - April 1979 Lecturer in Mathematics, Faculty of Science, University of Nairobi.
April 1979 - April 1989 Senior Lecturer in Mathematics, Faculty of Science University of Nairobi.
Sept 1985 - Nov 1994 Director, Institute of Computer Science, University of Nairobi.
May 1989 - August 1997 Associate Professor, Institute of Computer Science, University of Nairobi.
August 1997 – August 2001 Professor, Department of Computer Science and Engineering, University of Mauritius.
February 1998 – August 2001 Director, Centre for Information Technology and Systems, University of Mauritius
Sept. 2001 -- June 2002 Associate Professor, Institute of Computer Science, University of Nairobi
July 2002 -- August 2010 Professor, School of Computing and Informatics University of Nairobi.
August 2010- to date Professor of Computer Science, Bondo University College/ Jaramogi Oginga Odinga University of Science & Technology *on post retirement contract since 19th May 2015*
September 2010- to date Director, ICT Directorate; Bondo University College/ Jaramogi Oginga Odinga University of Science & Technology

RESEARCH INTEREST I:

SCIENTIFIC COMPUTATION, APPROXIMATION THEORY, MODELLING, INFORMATICS POLICY

PUBLICATIONS & PROCEEDINGS: REFEREED / EDITED: PEER REVIEWED

Journals:

1. Machine Learning Protocol for Secure 5G Handovers. Nyangaresi, V.O., **Rodrigues, A.J.** & Abeka, S.O. *Int J Wireless Inf Networks* (2022). DOI: <https://doi.org/10.1007/s10776-021-00547-2>
2. Evaluation Framework for School Management Information Systems (SMIS) in Secondary Schools. Bernard Amollo, Joshua Agola, Anthony **Rodrigues** 2022 IJSRP Vol.1 Jan <http://doi.org/10.29322/IJSRP.12.01.2022.p12164>
3. Proto-Type Intelligent Log-Based Intrusion Detection System. 2020 Gitau Joseph M and **Rodrigues Anthony J.**, & Abuonji P. *Int.J. Adv. Network & Applics.* Volume: 12 (1) pp 4519-4527 ISSN: 0975-0290
4. Secure Handover Protocol for High Speed 5G Networks, (2020). Vincent N. Omollo, **Anthony J. Rodrigues**, & Silvanace O. Abeka. *Int. J. Advanced Networking and Applications*, Volume 11(6), 4429-4442, DOI:10.35444/IJANA.2020.11061 <https://www.ijana.in/v11-6.php#>
5. GUTI-Based Multi-Factor Authentication Protocol for De-synchronization Attack Prevention in LTE Handovers (2020). . Vincent N. Omollo, Silvanace O. Abeka, & **Anthony J. Rodrigues** International Journal of Cyber-Security and Digital Forensics (IJCSDF) 9(1), 1-11.
6. Delay Sensitive Protocol for High Availability LTE Handovers. (2020) Vincent Omollo Nyangaresi, Silvanace O. Abeka and **Anthony J.Rodrigues**. *American Journal of Networks and Communications*, 9(1): 1-10, (2020). DOI: 10.11648/j.ajnc.202009012.11
7. Determinants of Computerised System for Execution of Maritime Security Systems. (2020) Sanja M.M., **Rodrigues A.J.** *Journal of scientific & Engineering Research.* Vol 7 (1) pp 65-75. <https://jsaer.com/archive/volume-7-issue1-2020/>
8. A System Dynamics Model of Technology and Society, In the context of a Developing Nation. 2020, Omamo A., **Rodrigues A.J.** & Wafula J. M. *Int. J. Sys. Dyns Appl.* Volume 9 issue 2 pp42-63 DOI: 10.4018/IJSDA.2020040103
9. Kenya's Vision 2030, Modelling Technology Usage and the Economy, A. Omamo, **A. Rodrigues** and J. W. Muliaro (2019); *Technology in Society.* ELSEVIER, Nov . 2019 <https://doi.org/10.1016/j.tech.soc.2019.04.01> 101135
10. Mobile Phone Penetration and Economic Growth In Kenya: A Systems Dynamics Approach In the Context of the Kenyan Vision 2030 Amos.O.Omamo , **Anthony. J. Rodrigues** , and Wafula Muliaro. *G.SJ:* Volume 6, Issue 12, December 2018, Online: ISSN 2320-9186 www.globalscientificjournal.com
11. Load Balanced Network: Design, Implementation and Legal Consideration Issues. 2018 Abuonji, P., **Rodrigues A.**, & Raburu, G. *Transactions on Networks and Communications*, 6(5), 16. doi:<http://dx.doi.org/10.14738/tnc.65.5099>
12. A Stratified Cyber Security Vigilance Model: An Augmentation of Risk-Based Information System Security 2018 Abuonji, P., **Rodrigues A.**, & Raburu, G. *Transactions on Networks and Communications*, 6(5), 41. doi: <http://dx.doi.org/10.14738/tnc.65.5099>
13. A Systems Dynamics Model for Mobile Industry Governance in the Context of the Kenyan Vision 2030. 2018 Omamo A., **Rodrigues A.J.** & Wafula J. M. *Int. J. Sys. Dyns Appl.* Volume 7 (2) pp 80-100
14. Multivariate Probabilistic Synthesis of Cellular Networks Teletraffic Blocking with Poissonian Distribution Arrival Rates (2018). Vincent N. Omollo, S. Abeka, & **Anthony Rodrigues.**, *Int.J. Wireless and Microwave Technologies*, Volume 4, 14-39 DOI: 10.5815/ijwmt.2018.04.02 <http://www.mecspress.net/ijwmt/v8n4.html>
15. Secure Timing Advance Based Context-Aware Handover Protocol for Vehicular Ad-Hoc Heterogeneous Networks, (2018). Vincent N. Omollo, S. Abeka, & **Anthony Rodrigues**. *International Journal of Cyber-Security and Digital Forensics*, 7(3), 256-274. DOI: <http://dx.doi.org/10.17781/P002450>
16. Security Evaluation of Cellular Networks Handover Techniques, (2018). Vincent N. Omollo, S. Abeka, & **Anthony Rodrigues**. *Int. J. Computer Network and Information Security*, Volume 5 (5), 45-59 DOI: 10.5815/ijcnis.2018.05.06
17. Efficient Resource Utilization in Information Security Risk Management Investment. Mitende Nicholus Nyapete, **Anthony Rodrigues**, Samuel Liyala *International Journal of Computer Applications Technology and Research* 2018 Volume 7, 02, 86-93, ISSN:2319-8656 <http://ijcat.com/archieve/volume7/issue2/ijcatr07021008.pdf>
18. Information Communication Technology Training as a Prerequisite for E-Government In County Governments Of Kenya. International Journal of Computer Applications Technology and Research Mengich Esau Mneria , Liyala Samuel , **Rodrigues Anthony** 2017 Volume 6, Issue 8, 396-400. <http://ijcat.com/archieve/volume6/issue8/ijcatr06081020.pdf>
19. Effectiveness of Security Controls on Electronic Health Records Everleen Wanyonyi, **Anthony Rodrigues**, Silvanace Abeka, Solomon Ogara International Journal of Scientific & Technology Research 2017 Vol 6, Issue 12, pp 47-54 <http://www.ijstr.org/final-print/dec2017/Effectiveness-Of-Security-Controls-On-Electronic-Health-Records-.pdf>
20. Analysis of Partial Least Squares on Split Path Models: Underpinning Delone & Maclean Theory. Sanja Michael Mutong'wa, **Anthony J Rodrigues**, Samuel Liyala. *Journal of Scientific and Engineering Research*, 2017 4(9):453-463 <http://jsaer.com/download/vol-4-iss-9-2017/JSAER2017-04-09-453-463.pdf>
21. Assessing Emerging Innovative Applications used in County Governments of Kenya Mengich E. M., Liyala S., **Rodrigues A. J** *International Journal of Advanced Research in Computer and Communication Engineering*. 2017 Vol.6 (8) pp 1-5 <http://ijarcce.com/upload/2017/august-17/IJARCCE%201.pdf>

22. Effect of Integrated Financial Management Information System Use in Kenya : Case of Government Treasury. Sanja Michael Mutong'wa, **Anthony J Rodrigues**, Samuel Liyala. *International Journal of Advanced Engineering and Management Research* 2017 Vol. 2 (2) pp254-268 <http://www.ijaemr.com/link1.php?id=32>
23. Enterprise Resource Planning Systems and Integrated Financial Management Information System in Kenyan Public Sector: An Assessment Sanja Michael Mutong'wa, **Anthony J Rodrigues**, Samuel Liyala *International Journal of Advanced Engineering and Management Research* 2017 Vol. 2 (2) pp269-282 <http://www.ijaemr.com/link1.php?id=33>
24. Up Scaling Invasive Plant Biomass Briquette Production: Case of Kendu Bay, Lake Victoria, Kenya. **A J Rodrigues** , M.O. Odero, D. Kerich, F. Odundo, W. Akuno. *Advances in Social Science Research* March 2017 Vol 4 No 4 pp10-30 <http://dx.doi.org/10.14738/assrj.44.2698>
25. Usability Maturity Model and Assessment Tool for Virtual Learning Systems. Omieno K.K & **Rodrigues A. 2016.** *International Journal of Advanced Research in Computer and Communication Engineering*. Vol 5. No.12 December 2016 pp:78-84. <http://www.ijarcce.com/upload/2016/december-16/IJARCCCE%2017.pdf>
26. Model for HIV Infection & Database. G.P. Pokhariyal, **A.J.Rodrigues**, A. Mungai, R.O. Simwa, F. Njui, & S.K. Moindi. *Journal of Int. Res. Med. & Pharm. Sci* 2015 Vol 5(3) pp 134-140. Int. Knowledge Press.
27. Socio-Economic Factors Influencing the Spread of Drinking Water Diseases in Rural Africa: Case Study of Bondo District, Kenya. **Rodrigues A.J.** ,Wandiga S.O., Odundo F.O. Wambu E.W. *Journal of Water and Health* 2015 Vol 13(2) pp. 500-509 IWA Publishing <http://dx.doi.org/10.2166/wh.2014.039>
28. Converting Water Hyacinth to Briquettes: A Beach Community Based Approach. **Rodrigues A.J.**, Odero M.O., Kerich D., Hayombe P.O., Akuno W. & Maobi I.O. *Int.J.Sc. Basic & Appl Res (IJSBAR)* 2014 Vol 15 (1)358-378. <http://gssrr.org/index.php?journal=JournalOfBasicAndApplied&page=article&op=view&path%5B%5D=1246&path%5B%5D=1690>
29. An adaptive ICT-enabled model for knowledge identification and management for enterprise development. Mindila A.N, **Rodrigues A.J.**, McCormick D.& Mwangi R.M. *Int. J. Sys. Dyns Appl.* 2014 Volume 3 (1) pp 71-89
30. ICT powered strategic flexibility system dynamic model: a pillar for development in micro and small enterprises. Mindila A.N, **Rodrigues A.J.**, McCormick D.& Mwangi R.M. *Int. J. Sys. Dyns Appl.* 2014 Volume 3 (1) pp 90-110
31. Institutional Arrangement and Change Dynamics for Economic Development in an ICT Enabled Environment. Mindila A.N, **Rodrigues A.J.**, McCormick D.& Mwangi R.M. *Int.J.ICT.Res.Vol.3. No.4* 2013 pp149-158.
32. Visualization of ICT-Enabled Interactions in Micro and Small Enterprises Metanetwork using Dynamic Social Network Analysis Mindila A.N, **Rodrigues A.J.**, McCormick D.& Mwangi R.M. *Int.J.ICT.Res.Vol.3. No.4* 2013 pp124-133.
33. A Conceptual Model for ICT for Economic Development Using Complex Adaptive System Approach: Case of a Micro And Small Enterprise (MSE) Association. Mindila A.N, **Rodrigues A.J.**, McCormick D.& Mwangi R.M. *Int. J. Comp & ICT Res.* 2013 Vol. .7(2), pp 23-47
34. Measuring ICT development with an Integrated Information and Communication Technology Development Dynamic (IICTDD) Framework. Mindila A.N, **Rodrigues A.J.**, McCormick D.& Mwangi R.M. *International Int. J. Comp & ICT Res.* 2013 Vol. .7(2), pp 67-91.
35. Internet utilization: A case of connected rural and urban secondary schools in Kenya. Kiptalam G.K, & **Rodrigues, A.J** *Int J.Comp & ICT.* June 2010 pp 49-63.
36. Browsing impact of large herbivores on Acacia xanthophloea Benth in Lake Nakuru National Park, Kenya. Dharani, N. Kinyamario, J.I. Wagacha, P.W. & **Rodrigues, A.J.** *Afr. J. Ecol.* 2009, Volume 47, No.2, Pages: 184-191 <http://www3.interscience.wiley.com/cgi-bin/fulltext/120779729/>
37. Tertiary ICT Education in the East African Community (EAC): Human Capital and Curriculum Development. **Rodrigues A.J.** & Wafula J. M. *Int J.Comp & ICT.* Oct 2008 Special Issue pp76-84 ISBN 1996-1065 on-line.
38. Towards an Education Evaluation Framework: Synchronous and Asynchronous e-Learning Cases. Omwenga E.I. and **Rodrigues A.J.** *Journal of the Research Centre for Educational Technology* Spring 2006. <http://www.rcet.org>
39. Towards an Integrated Management Information System: A Case of the University of Mauritius. **Rodrigues A.J.** & Govinda S. *Information Technology for Development* 2003 Vol 10 pp41-56 IOCPress
40. Review of dynamical models in plant pathogen epidemiology **Rodrigues A. J.**, *University of Mauritius Research Journal: Science and Technology* 1998 Vol. 1. pp 49-71.
41. Cost sharing in public universities: A Kenyan case study. **Rodrigues A. J.** & Wandiga S. O. *Higher Education Policy.* 1997. Vol 10, No. 1, pp 55-80
42. Trends in Informatics education. **Rodrigues A. J.** & Getao K. W. *Higher Education Policy.* 1995. Vol 8. No. 3 pp. 57 – 63
43. Error analysis of dynamical models in epidemiology. Pokhariyal G. P. & **Rodrigues A. J.** *Int. J. of Math. & Math. Sci.* 1994. Vol. 17 No. 1 pp 119-124.
44. "Informatics in higher education-Kenya case study. **Rodrigues A. J.**, Scott R. J. P., Okelo-Odongo W., Moturi, C.A. *Higher Education Policy.* 1993. Vol. 6 No. 3, pp 41-49.
45. "An accurate epidemiological model" Pokhariyal G. P. & **Rodrigues A. J.** *Applied Mathematics & Computation.* 1993. Vol. 53 pp. 1-12.
46. Error estimates for recursive Padé approximants to exp (A). **Rodrigues A. J** *Discovery and Innovation.* 1990 Vol.2 No. 1 pp. 56-65

Rodrigues A.J.: CV

47. Management of technological change: Kenya case study. **Rodrigues A. J.**, Scott R. J. P., & Okelo-Odongo W. *Information Technology for Development*. 1989 Vol. 4 No. 2, pp. 399-471
48. Convergence of Padé Kernel approximants to the delayed Dirac function. **Rodrigues A.J.** *J. Inst. Maths. Applics.* 1980. Vol 25, 17-27.
49. On the accuracy of quadrature Laplace Transform inversion and the solution of state-space equations. **Rodrigues A.J.** *J. Inst. Maths. Applics.* 1978. Vol 22, 283- 296.
50. Properties of constants for a quadrature formula to evaluate Bromwich's integral. **Rodrigues A.J.** *Journal of the Institute of Mathematics and its Applications*. 1976. Vol 18, 49-56.
51. An error analysis and convergence of a quadrature formula to invert Laplace transforms. **Rodrigues A.J.** *J. Inst. Maths. Applics.* 1977. Vol 20, 21-32.

Chapters in Book:

1. ANN-FL Secure Handover Protocol for 5G and Beyond Networks.2021. Nyangaresi V.O., **Rodrigues A.J.**, Abeka S.O. In: Zitouni R., Phokeer A., Chavula J., Elmokashfi A., Gueye A., Benamar N. (eds) Towards new e-Infrastructure and e-Services for Developing Countries. *AFRICOMM 2020. Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering*, vol 361. Springer, Cham. https://doi.org/10.1007/978-3-030-70572-5_7
2. Governance, Complexity, and Resilience of the Kenyan Mobile Industry in the Context of Its Strategic Vision, Omamo A., **Rodrigues A.J.** & Wafula J. M. 2021 . in *Handbook of Research on Modeling, Analysis, and Control of Complex Systems*. (Eds) Ahmad Taher Azar & Nashwa Ahmad Kamal. DOI: 10.4018/978-1-7998-5788-4.ch010. IGI-Global.
3. Generic Socio-Techno-Economic model for mobile phone usage and Economic Growth: Kenyan Case in Vision 2030 Implementation. Omamo A & **Rodrigues A.J.** , *AFRICOMM 2014: LNICST* Vol 147 , 978-3-319-16885-2, 336705_1_En,Chapter 31Springer, Heidelberg
4. Relevant Computing Curricula in Sub-Saharan Africa. Rai, I. A., **Rodrigues, A. J.**, Venter, I. M., Mills, G., Suleiman, H., Edumadze J. In: E-Infrastructure and e-Services for Developing Countries (eds.) Jonas, K., Rai, I.A., Glitho, Tchunte.M., 2013, *AFRICOMM 2012: LNICST* 119, pp 239-248 Springer, Heidelberg
5. Information Scarcity to Surfeit: A Cautionary Tale. **Rodrigues A.J.** (Eds) Kizza J.M., Lynch K & Nath R.. *Strengthening the Role of ICT in Development* 2011 Vol VII ISBN 978-9970-25-128-5
6. License Plate Recognition System: Localization for Kenya. Wambui P.N., Opiyo E.T.O. & **Rodrigues A.J.** (Eds) Kizza J.M., Lynch K., Nath R., & Aisbett J. *Strengthening the Role of ICT in Development* 2010 Vol VI pp355-366 ISBN 978-9970-25-015-8
7. LipaNet: Financial Services Integrated Platform and Gateway Using Mobile Technology. Kasomo M.M., Njonjo R.W. & **Rodrigues A. J.** (Eds) Kizza J.M., Lynch K., Nath R., & Aisbett J. *Strengthening the Role of ICT in Development* 2010 Vol VI pp186-201 ISBN 978-9970-25-015-8
8. Accessibility and Utilization of ICTs among Secondary Schools Teachers in Kenya. Kiptalam, G.K. & **Rodrigues, A.J** (Eds) Kizza J.M., Lynch K., Nath R., & Aisbett J. *Strengthening the Role of ICT in Development* 2010 Vol VI pp 246-263 ISBN 978-9970-25-015-8
9. Development Policy Coherence: Can ICTs Facilitate? **Rodrigues A. J** Key (Eds) Kizza J.M., Lynch K., Nath R., & Aisbett J. *Strengthening the Role of ICT in Development* 2010 Vol VI pp 246-263 ISBN 978-9970-25-015-8
10. Managing University Research: Key Policy Issues. **Rodrigues A.J.** (Eds) Kizza J.M., Lynch K., Nath R., Aisbett J., & Vir P., *Strengthening the Role of ICT in Development* 2009 Vol V pp60-66 ISBN 978-9970-02-738-5.
11. The role of ICT in creation and sustenance of trust in SME clusters and inter-organizational systems. Mindila A., McCormick D., Rodrigues A.J. & Mwangi R.W. (Eds.) Aisbett J., Gibbon G., **Rodrigues A.J.** Kizza J.M., Nath R., & Renardel G.R . *Strengthening the Role of ICT in Development* 2008 Vol IV pp194-202 ISBN 978-9970-02-871-2.
12. Data Security Lapses in Developed Societies: Public and Private Sector Cases. Rodrigues A.J (Eds.) Aisbett J., Gibbon G., **Rodrigues A.J.** Kizza J.M., Nath R., & Renardel G.R . *Strengthening the Role of ICT in Development* 2008 Vol IV pp203-214 ISBN 978-9970-02-871-2.
13. Does Interactive Learning Enhance Education : For Whom, In What Ways and In what Contexts? **Rodrigues A.J.** (Eds.) Kizza J., Muhirwe J., Aisbett J., Getao K. W., Mbarika V. W., Patel D., & Rodrigues A.J., *Strengthening the Role of ICT in Development* 2007 Vol III pp278-289 ISBN 978-9970-02-730-9.
14. Conceptual ICT tool for Sustainable Development: The Community Development Index (CDI) Wafula J.M., **Rodrigues A.J.** & Wanjohi N. (Eds.) Kizza J., Muhirwe J., Aisbett J., Getao K. W., Mbarika V. W., Patel D., & Rodrigues A.J., *Strengthening the Role of ICT in Development* 2007 Vol III pp498-508 ISBN 978-9970-02-730-9.
15. ICTs In Developing Countries: Contexts, Challenges And Interventions. **Rodrigues A.J.** (Eds.) Joseph Kizza, Janet Aisbett, Andrew Vince, and Tom Wanyama , *Special Topics in Computing and ICT Research: Advances in Systems Modelling and ICT Applications*, 2006Vol. 2, pp. 261-276, ISBN 13:978-9970-02-604-3; ISBN 10:9970-02-604-6.,
16. Informing Regional ICT Policy: Case Study Of Trends In ICT Indicators of OECD, EU, COMESA and EAC. Wafula J.M. , **Rodrigues A.J.**, and Wanjohi N. (Eds.)Joseph Kizza, Janet Aisbett, Andrew Vince, and Tom Wanyama , *Special Topics in Computing and ICT Research: Advances in Systems Modelling and ICT Applications*, 2006Vol. 2, pp. 227-246, ISBN 13:978-9970-02-604-3; ISBN 10:9970-02-604-6.,

17. "Income generation at public universities: A case of the University of Nairobi Enterprises and Services Limited". **Rodrigues A. J.**, Wainaina G. and Mwangi E. W. in *'Measuring Computing Research Excellence and Vitality'* Eds. Williams D & Baryamureeba V. 2006 Vol 1 pp 247-265 ISBN 13:978-9970-02-592-3; ISBN 10:9970-02-592-9.
18. Sub-regional ICT policy: Case of the East African Community. , **Rodrigues A.J.** and Wafula J.M. in *'Measuring Computing Research Excellence and Vitality'* Eds. Williams D & Baryamureeba V. 2006 Vol1 pp 89-111 ISBN 13:978-9970-02-592-3; ISBN 10:9970-02-592-9.
19. Towards an Education Evaluation Framework: Synchronous and Asynchronous e-Learning Cases. Omwenga E.I. and **Rodrigues A.J.** in *'Measuring Computing Research Excellence and Vitality'* Eds. Williams D & Baryamureeba V. 2006 Vol1 pp 272-285 ISBN 13:978-9970-02-592-3; ISBN 10:9970-02-592-9.
20. Health Informatics: Implications of Evaluation Models for Developing Countries. **Rodrigues A. J.**, *Importance of Mathematical Modelling of Biological & Biomedical Processes.* Eds. Livingston L.S., Mugisha J.Y.T. & Kasozi J. African Society for Biomathematics. Series 1 pp. 79-94. Kampala :Makerere University Press 2004
21. The emerging global electronic messaging and networking technologies: An analysis of their potential developmental impact in Africa". Dzidonu C.K., **Rodrigues A. J.** & Okot-Uma R. *African Development Review: Special Issue; Information, Knowledge and Africa's Development.* 1998 Vol. 10, No. 1, Ed. Olubenga Adesida , pp 189-210. African Development Bank.
22. Simulating plant-pathogen epidemics". **Rodrigues A. J.** & Moturi C. A. *Information Technology Utilisation in Developing Countries* 1993. Eds. Ojo S. O., Parsons D. I., Ige J. A. pp 124-129. P&P. Co. Botswana (Pty) LTD
23. Computer-based information systems in their social context: Use of Different Perspectives". **Rodrigues A. J.** & Waema T. M. *Social Implications of Computers in Developing Countries.* 1992. Eds., Bhatnagar & Odedra, pp. 233-243. Tata Mcgraw-Hill
24. "Training of information analysts at the Institute of Computer Science, University of Nairobi". Moturi C.A. & **Rodrigues A.J.** *Information Technology Manpower: Key issues for Developing Countries.* 1992 Ed., Bhatnagar S.C., pp. 103-114. Tata-Mcgraw-Hill

Proceedings (refereed) :

1. Efficient Group Authentication Protocol for Secure 5G Enabled Vehicular Communications. Vincent N. Omollo, **Anthony J. Rodrigues** & Silvanice O. Abeka. 2020 *16th International Computer Engineering Conference (ICENCO), Cairo, Egypt*, pp. 25-30, doi: 10.1109/ICENCO49778.2020.9357372
2. Secure Algorithm for IoT Devices Authentication. Vincent N. Omollo, **Anthony J. Rodrigues** & Silvanice O. Abeka. *Proceedings of European Association for Innovation 7th International Conference on Mobility, IoT and Smart Cities*, Viana do Castelo, Portugal, (2020).
3. ANN-FL Secure Handover Protocol for 5G and Beyond Networks. Vincent N. Omollo, **Anthony J. Rodrigues** & Silvanice O. Abeka. *Proceedings of the European Association for Innovation 12th International Conference on e-Infrastructure and e-Services for Developing Countries*, Mauritius, (2020).
4. Neuro-Fuzzy Based Handover Authentication Protocol for Ultra Dense 5G Networks, 2020 V. O. Nyangaresi, **Anthony Joachim Rodrigues** and S. O. Abeka, *2nd Global Power, Energy and Communication Conference (GPECOM)*, Izmir, Turkey, 2020, pp. 339-344, doi: 10.1109/GPECOM49333.2020.9247938.
5. Security Analysis of Reconisance Network Protocols. Vincent Omollo Nyangaresi, Silvanice O. Abeka and **Anthony J. Rodrigues** . *Proceedings of the 2nd JOOUST International Conference February 2019* .Kisumu
6. Crowdfunding Mobile Money System. Machoka Frank, Otieno Felix, **Liyala Samuel, Rodrigues Anthony. J.** & Abuonji P. *Proceedings of the 2nd JOOUST International Conference February 2019* .Kisumu
7. A Multi-Layered and Networked (Mul-Net) National ICT Strategy Conceptual Framework for Sustainable Development. Wafula J.M. & **Rodrigues A.J.** . *Proceedings of the 4th NCST Conference* 2011. NCST
8. Novel Decision Support Tool based on ICT and Social Networks for Sustainable Development. Wafula J.M., **Rodrigues A.J.** & Wanjohi N. *Proceedings 4th International Conference on Technology, Knowledge and Society.* 2008 North Eastern University Boston
9. Modelling and Simulation of Natural Growth **Rodrigues A.J.** (Eds.) Getao K.W. & Wagacha *Proceedings of 1st International Conference in Computer Science & ICT COSCIT* 2007 pp.1-9 School of Computing & Informatics, University of Nairobi. ISBN: 9966-7284-0-6
10. Proposal for Metadata Models and Standards for Kenya National Spatial Data Infrastructure. Odongo R.O. and **Rodrigues, A.J.** (Eds.) Getao K.W. & Wagacha *Proceedings of 1st International Conference in Computer Science & ICT COSCIT* 2007 pp67-76 School of computing & Informatics, University of Nairobi. ISBN: 9966-7284-0-6
11. ICT Regulation Review & Analysis. Wafula J.M. and **Rodrigues A.J.**, (Eds.) Getao K.W. & Wagacha *Proceedings of 1st International Conference in Computer Science & Informatics COSCIT* 2007 pp104-109 School of computing & Informatics, University of Nairobi. ISBN: 9966-7284-0-6.
12. The Use of Diffusion Models to Leverage the Strategic Management of Information Systems in Developing Countries. Mutanu, L. and **Rodrigues A.J.**, (Eds.) Getao K.W. & Wagacha *Proceedings of 1st International Conference in Computer Science & Informatics COSCIT* 2007 pp 117-123 School of computing & Informatics, University of Nairobi. ISBN: 9966-7284-0-6.

Rodrigues A.J.: CV

- Utilization of ICTs for Poverty Reduction: Towards a Poverty Reduction Framework. Ruhiu, S.N. and **Rodrigues A.J.**, (Eds.) Getao K.W. & Wagacha *Proceedings of 1st International Conference in Computer Science & Informatics COSCIT 2007* pp. 124-123 School of computing & Informatics, University of Nairobi. ISBN: 9966-7284-0-6.
- An Integrated Regional ICT Policy for the East Africa Community (EAC): Impact on a Possible Information Revolution. Wafula J.M. , **Rodrigues A.J.**, Waiganjo W.P., and Wanjohi N. *Proceedings of the Third Conference on Information Technology and Economic Development*. 2004 Ghana .INTERCED
- Global Knowledge and the Information Society : Illusion or Reality for developing countries.? **Rodrigues A.J** and Wafula J.M. *Proceedings of the International Conference on the Application of ICT in Enhancing Higher Learning Education* April 2004.pp8-19 University of Dar-es-salaam. Tanzania
- A Novel Framework for E-Commerce Diffusion and Adoption and supporting Digital Documentation Options Wafula M. , **Rodrigues A.J.**, and Wanjohi N. *Proceedings of the WAITRO Bienial Congress* September 2004. JKUAT Kenya
- IT Development in a University Environment. A Case of the Institute of Computer Science, University of Nairobi. **Rodrigues A.J.** *Proceedings of a Regional Workshop on Establishing a Regional Master of Science in Computer Science Degree Programme*. Feb 2003 pp 49-53 Makerere University, Uganda
- Electronic Distance Education and Enabling Technologies in a Small Island State. Govinda S & **Rodrigues A. J.** *Proceedings of Colloquium on Distance Education and Technology, November 1999, Santiago* pp43-54. Catholic University of Chile.
- The East and Southern Africa network (ESANET): Technical and management perspectives. *Proceedings of IFIP, WG9. 4 International Conference 1995 Cairo*, pp. 55-80
- Kenyan PACSAT licensing experience. **Rodrigues A. J.** & Macharia G. M. *Proceedings of International Workshop on Digital Radio Technology and Applications 1992*. Nairobi. Eds., Baiya H, Balson D, Garriot G. pp 159-174; International Development Research Centre.
- Information Technology with a development perspective.” Macharia G.M & **Rodrigues A.J.** *Proceedings of the 7th PWPA Conference on Employment and Education: Strategies & Opportunities for Development*. 1990, Nairobi, Chapter 9 pp. 121-132. Ed., Gray, K.R., PWPA (K)
- An appraisal of the postgraduate diploma in computer science of the University of Nairobi, Institute of Computer Science. Scott R. J. P. & **Rodrigues A. J.** *Proceedings of International Congress on Education and Informatics*. 1989 Paris. pp. 545-650 UNESCO
- Some aspects of health care Management Information Systems. Case Study: Intestinal Parasitoses in a Large Agricultural Industry. Rodrigues A.J., Kamunvi F., & Minawa A. *Proceedings of the Third African Regional Conference of the International Epidemiological Association, Nairobi 1986*. Eds. Kenya P. R. et al., pp. 270-276
- State of the art computer science in East and Central Africa”. **Rodrigues A.J.** & Getao K.W. *Proceedings: Workshop in Curriculum Development in Physics, Mathematics and Computer Science, Nairobi 1986*. pp. 143-147. ICTP.
- On best IMN and Dirac Kernel approximants. **Rodrigues A.J.** *Proceedings of the Second International Conference on Numerical Analysis and its Applications*. 1986. Computational Mathematics II Ola Fatunla S. (ed) pp. 202-208. Boole Press
- Uniform derivative convergence of diagonal Padé approximants to $\exp(z)$ on unbounded sets.” **Rodrigues A.J.** *Proceedings of 1st Eastern African Symposium in Applied Mathematics, and Mathematical Education, Nairobi*. 1981. Section B, pp. 25-36

Books:

- Strengthening the Role of ICT in Development 2008 Vol IV Eds: Aisbett J., Gibbon G., **Rodrigues A.J.** Kizza J.M., Nath R., & Renardel G.R . ISBN 978-9970-02-871-2.
- Strengthening the Role of ICT in Development 2007 Vol III Eds: Kizza J., Muhirwe J., Aisbett J., Getao K.W., Mbarika V.W., Patel D., & **Rodrigues A.J.**, ISBN 978-9970-02-730-9.

In preparation :

- Mensurational Data Diagnostic System Design: Relative growth and Quasi-Allometric Patterns of *Acacia xanthophloea* Benth in Lake Nakuru National Park, Kenya **A.J. Rodrigues**, P.W.Wagacha, N. Dharani, G.P. Pokhariyal Technical Report .being prepared for submission to *Afr. J. Ecol.*
-

RESEARCH INTEREST II:

MODELING & SIMULATION, INFRASTRUCTURAL CONTEXTS FROM A DEVELOPMENT PERSPECTIVE

AGRICULTURE

- “Dynamical models in plant-pathogen epidemiology” I U C. Mathematics Subject meeting, Kampala 12-15 December 1988
- “Accurate holistic dynamical models in epidemiology”. Rodrigues A. J. & Ramos A. *Technical Report No. AJR AR/1/83* (National Agricultural Laboratories).
- “Determination of the optimum tea growing altitude in Kenya with respect to yield” (Tea Research Foundation of Kenya). A preliminary analysis 1985.
- “Implication of accurate dynamical models in epidemiology” Pokhariyal G.P. & Rodrigues A. J. *Proc. Int. Congress of Mathematicians. Aug. 1990 Kyoto. Abstracts pp 258. Technical Report ICS/90/1.*

TRANSPORT (Kenya Railways)

Rodrigues A. J.: CV

5. "Appraisal of the availability of Motive Power with special attention to design and maintenance factors". *AJR-ALU/1/84*.

PUBLIC-HEALTH

6. "Study of Intestinal parasitoses in Large Agricultural Industries in Kenya. The Awendo Sugar Industry". *Technical Report No. K. M. R./1/86* Kamunvi F. Minawa A., Rodrigues, A. J.
7. "The geometry of the spread of the human African Trypanosomiasis Infection in Kenya." Mwanje J. I. & Rodrigues A. J. *Technical Report ICS/96/1*.
8. "Theoretical ecology of biotopes interactions as a determinant of the geographic spread of the Rhodesian sleeping sickness in Lambwe Valley, Kenya." Mwanje J. I., Rodrigues A. J. & Odingo R. S. *Technical Report ICS/96/2*.
9. "Effective transmission and infection capacity of Trypanosoma brucei rhodesiense parasite in Lambwe Valley, Kenya." Mwanje J. I. & Rodrigues A. J. *Technical Report ICS/96/3*.
10. "Geopolitical consideration for public health policy: The case of African Trypanosomiasis control in Eastern Africa." Mwanje J. I., Odingo R. S. & Rodrigues A. J. *Technical Report ICS/96/4*.

INFORMATICS

11. "Informatics training and education in Kenya" 1986. Rodrigues A. J. and Opiyo J. C. *Read at Curriculum Development Workshop*, Nairobi, ISAPAM.
12. "The Role of Informatics Technology in development". *Proceedings of the Seminar on the Introduction of Informatics Technology in Developing Countries, Moi University* 1987. Ed. Tonfoni, G. Bologna.
13. "Towards An Information and Informatics Policy". Read at *Seminar: Formulation of National Information And Communication Policy For Kenya*. 1991, Kericho, Kenya National Commission for UNESCO.
14. ICT for development : Tensions between Information Perspectives. Rodrigues A. J. 2003 East African Community Head Quarters, under the auspices of ECA VarsityNet "Software Research in e-government project: : A pilot project for East Africa" Lead researcher.
15. "Global Knowledge and the Information Society: Illusion or Reality for Developing Countries? Rodrigues A. J. & Wafula J. M. *Proceedings International ICT Workshop on the Application of ICT in Enhancing Higher Learning Education*. May 2004 pp 8-19 Dar-es-salaam

DEMOGRAPHY

16. An integrated model approach to the generation of Life Tables. A position paper (1985).

HIGHER EDUCATION

17. "Recovering Public Higher Education Costs through Loan Schemes". Wandiga, S.O., Rodrigues A. J. and Chana R. P. S. 1991. Prepared for the Loan Recovery Unit.
18. "Science and Technology: Vision for a Learning Society: Rodrigues A. J. *Proceedings of the National Seminar on Tertiary Education*. TEC, Mauritius 1998.
19. Science and Technology Policy: Some generic issues and frameworks. July 2003. For Kenya National Academy of Science
20. Information and Communication Technology Status in Higher Education Institutions in Kenya. Report for Public Universities Inspection Board: January 2006
21. ICT Education : Trends, Risks and Opportunities Editor(joint) : Report of the meeting of the specialised committee on ICT education in East Africa, sponsored by Inter University Council for East Africa. IUCEA November 2006

TELEMATICS

22. "Microcomputer-based data communications networking in the East and Southern African Region (ESANET)". *Start up Workshop Proceedings, Nairobi November 1990; Design Workshop Proceedings, Harare May 1991; Evaluation Workshop Proceedings, Kampala September 1993*.
23. "Computer networks and telecommunications infrastructure in Africa". *Workshop on the Use of Microcomputers for Scientific and Technological Information Handling* Nairobi, Nov. 1991.
24. "Science and Technology information networks. Institutional perspectives on East and Southern African Network (ESANET)" Rodrigues A. J. *Seminar on National Networking of Science and Technology Information Systems*. 1994. Nairobi. National Council for Science and Technology.

INFORMATION SYSTEMS

25. "Information Systems and their Social Context: A Case of a University Admission System." Waema T. M. & Rodrigues A. J. *Technical Report ICS/92/1*. 1992
26. "Ensuring Quality Information: Integrity, Security and Privacy." *Seminar on Computer Security*. 1999. National Computer Board, Mauritius.
27. "IT development in a University Environment: A Case of the Institute of Computer Science, University of Nairobi ". *Workshop to establish a Regional Centre in Computer Science*. 2003 , Makerere University, Kampala
28. "Software research in e-government: A pilot project for East Africa " *A conceptual framework for sustainable e-government* Lead researcher: IUCEA co-ordinated project funded by UNECA: VarsityNet 2003-2004
29. ICTs in development: Contexts, Challenges and Interventions. Report for Public Universities Inspection Board: January 2006

BIOINFORMATICS

- 30 Mensurational Data Diagnostic System Design: Relative growth and Quasi-Allometric Patterns of *Acacia xanthophloea* Benth in Lake Nakuru National Park, Kenya .A.J. Rodrigues, P.W.Wagacha , N. Dharani , G.P. Pokhariyal Technical Report No SCI/ 2008/AJR/ 1. 27 pages

EXPOSITORY PAPERS

1. “Derivative properties and applications of the Padé approximant to $\exp(z)$ ”. *Technical Report AJR/80/1*, 30 pp.

REVIEWING:

1980 - Reviewer for: Mathematical Review, fifty (50) such reviews have been published by the *American Mathematical Society*. *Kenya Journal of Science and Technology* (10 papers); *Discovery and Innovation* (6 papers).

EXTERNAL ASSESSMENT

National University of Lesotho	Associate Professor 1991 Professor 2014
Makerere University -	Professor 1997, 2006 Associate Professor 2005, 2008(2) Senior lecturer 2006,2010 (2)
Sudan University of Science and Technology –	Professor 2000
University of Lagos –	Associate Professor (3) 2002
University of Swaziland	Professor 2005
University of Botswana	Professor 2011 Associate Professor 2015

SUPERVISION:

PhD Thesis: (Named Supervisor)

1. “Investigation of Systems Ecologic Models of Human African Trypanosomiasis Epidemics: A Case of Kenya.”. Justus Mwanje., *University of Nairobi* 1991 (completed)
2. “New Information and Communication Technology-based information systems as tools for Agricultural Communication and Development in Mauritius”. *University of Mauritius* 1998.-2001
3. “Information technology Policy: Enabling Governance and Sustainable Development in Kenya. ” Joseph. M. Wafula , *JKUAT* 2011(completed)
4. “ICT Policy formation for Developing Countries: Towards a Knowledge Society Foresight Framework” 2004- completed .S Ruhii., *University of Nairobi*
5. “Towards a Framework for the Development of a Regional Spatial Data Infrastructure: Case of National Resource Management in East Africa.’ R.O.Odongo, *University of Nairobi* 2006 – 2009 (incomplete supervisee deceased)
6. “Information and Communication Technology for Economic Development in the SME metal Industry.2014, Agnes.Mindila, *JKUAT* (completed)
7. “Performance –Based Usability Maturity Assessment for Virtual Learning Systems in Kenya”. Kelvin Kabeti Omieno *JOOUST* 2016 (completed)[named Academic Advisor]
8. “An Extended Acceptance and Use of Information Technology Model: Assessing Integrated Financial Management Systems in the Kenyan Public Sector”. Sanja M. Mutong”wa *JOOUST* completed October 2017
9. “ICT as an enabler of Good Governance in County Governments in Kenya” Esau M. Mengich *JOOUST* completed December2017
10. “Generic Socio-Techno-Economic model for mobile phone usage and Economic Growth: Kenyan Case in Vision 2030 Implementation” Amos Omamo, *JOOUST* 2012-completed January 2018
11. "A Stratified Cyber Security Vigilance Model for Corporate Information Technology Infrastructure" Paul Abuonji completed November 2019
12. ‘Pseudo-Stochastic Mobility Tracking Protocol for Secure & High Performance Handovers in 5G and Beyond Networks. Vincent Omollo Nyangaresi *JOOUST* completed April 2022
13. “Strategies for Security Design Patterns for Host/Media Network Architecture. Castro Yoga . *JOOUST* ongoing.
14. “ Framework for Fraud Management in Mobile Financial Services within Kenya”. Shadrack Ochieng Owiti. *JOOUST* Ongoing.
- 15.

M.Sc Thesis(Mathematics): (Named 1st Supervisor)

1. “Pade Approximation to $\exp(z)$ ” 1983 *Univ of Nairobi*
2. “Cliques, Coverings and Colourings with Application to Scheduling”. 1984. *Univ of Nairobi*

M.B.A. Dissertation: (Named 1st Supervisor)

1. “Information Technology: A Strategic Tool in Education & Training in Mauritius”. 1998. *University of Mauritius*
2. “A strategy for Civil Computerisation in Mauritius. 2000. University of Mauritius
3. “Market Survey of IT Products and Services in the Civil Service in Mauritius”. 2000. University of Mauritius
4. “Harnessing Information Technology (IT) for national competitive advantage”. 1998 University of Mauritius

MSc Projects (Named Supervisor)

RodriguesA.J: CV

1. Towards a Secure Electronic Health Records System: A case of Jaramogi Oginga Odinga Teaching and Referral Hospital Everleen Nekesa Wanyoni; JOOUST completed November 2017 1st Supervisor
2. Efficient Resource Utilization in Information Security Risk Management Investment: A Case Study of Small and Medium Enterprise in Nairobi, Kenya. Mitende Nicholus Nyapete completed December 2017 1st Supervisor
3. Information Security Model for University Networks in Kenya. Owango Jeremiah 1st Supervisor completed .2021
4. Information Security and Privacy in Electronic Health Care System Fredrick Ochieng' Omogah 1st Supervisor completed 2022
- 5.

MSc (Information Systems Dissertation) (Named 1st Supervisor)

University of Nairobi 36 some recent ones are listed below

1. "Technology Diffusion models for Strategic Management : A case of Integrated Systems in Kenya" Leah Mutanu ,September 2004.
2. " Road map to e-Government : A Kenya Case Study" T Mutinda 2004
3. " Assessment of ICT Diffusion Models : The Case of a Multinational Corporation in a Developing Country" J.M. Bwibo 2005.
4. Utilizing ICT to Realise Commuter needs in the Nairobi Transport Sector. H. Nyamboki 2005
5. Roads Information Database & Maintenance System for Kiambu District, Kenya G.C. Wekesa 2005
6. Analysis of e-readiness for the implementation of e-government in developing countries:Kenya case study A. Imbira 2005
7. GIS Aided Roads and Traffic Management System in Nairobi Central Business District D.N. Thuo 2006
8. "Inter-Carrier billing Clearinghouse" V.O. Adul 2008
9. "Public Administration Re-engineering (PAR).A Case study: Land and survey Departments , Ministry of Lands, Kenya". C. Gikwa 2008
- 10."Internet Utilisation: Case of Connected Rural and Urban Secondary Schools" G. Kiptalam 2009
- 11.Information System Failure Causes-An Investigation in Kenyan Organisations E. Mukoya 2009
- 12.Lake-wide Catch Management Based on GIS for Lake Victoria, East Africa. L Owour 2009
- 13."A Model Information System for CDF" T.O. Okungu 2009
- 14."Measuring ERP Post Implementation Success" E.C. Bushasho 2010'

Postgraduate Diploma in Computer Science (1st Supervisor) University of Nairobi

Forty (plus) Projects in System Analysis of, Finance, Administration and Academic Departments. These contributed towards the establishment of a Management Information System for Central Administration. (1985-94)

EXTERNAL EXAMINER:

APPLIED MATHEMATICS: 1986, 1995, 1996, 1997

Makerere University.

PURE AND APPLIED MATHEMATICS: 1986/87, 1987/88

Makerere University.

POSTGRADUATE DIPLOMA IN COMPUTER SCIENCE: 1986/87, 1987/88

Makerere University;

COMPUTER SCIENCE: 1988 School of Mathematical Sciences

University of Khartoum

1990-1992, 1995, 1996,2004-2008

Kenyatta University

1993, 1994, 1995,2006

University of Lesotho

1995, 1996, 1997.

Makerere University

1995-1998, 2002-2006

National University of Science and Technology(Zimbabwe).

2002 to 2018-

Egerton University

2006 -2016

Kabarak University

2007,2008,2009

Univ. of Dar es salam

2012,2014,2015,2016

Moi University

MSc. DISSERTATIONS:

Makerere University.

1. "Computerized Accounting Application in an Ugandan Environment". 1992.
2. "Mathematical Models for the study of HIV/AIDS transmission between sexually active groups and the role of Mobility to the spread of the epidemic". 1993.
3. "A comparison of some of the most common numerical methods for solving boundary value problems in ordinary differential equations". 1995.
4. "Mathematical models for the study of the effect of malaria, sleeping sickness and HIV/AIDS on a community." 1996.
5. "Deterministic Models for the Control/Eradication of Poliomyelitis."1998
6. The Complexity of the Dynamic Resource Allocation Problem 2011

University of Dar es Salaam

7. Challenges of Adaptive Computing: A Case of Higher learning Institutions in Tanzania, 2007

Rodrigues A.J.: CV

8. Development of a prototype of web based marketing information system (mis) for small-scale entrepreneurs (a case study of Lushoto district, Tanga) 2007
9. Development of an e-granary digital library for secondary school: a case of Duluti secondary school 2007
10. Development of a free and open Kiswahili spell checker 2007
11. Development of research information management system for higher education institutions in Tanzania: case study 2007
12. Development of a Web Based Information Management System for Institutional Meetings: A Case Study of University Of Dar-Es-Salaam 2007
13. Development of dynamic web based information system for students' service administration: The Case of Institute of Accountancy Arusha 2008

Jomo Kenyatta University of Agriculture and Technology

14. "Using fault tree analysis in a work breakdown structure to develop a low risk online electronic voting system: A case of the Electoral Commission of Kenya" 2008

National University of Science & Technology

15. Techniques For Construction Of Reliable High Bandwidth Multimedia Networks Based On Open/Free Source Software To Support E-Learning 2011

University of Nairobi

16. Simple image super resolution using the wavelet transform and an iterative back-projection technique 2016
- M.Phil. THESES:

Moi University

17. Techniques for Optimizing Network Utilisation & Performance at Kabarak University. 2016
18. Development of an Inventory & Asset Management System at the Kenya Industrial Research and Development Institute Using Radio Frequency Identification (RFID) 2016
19. Artificial Neural Network-Based Performance Endurance Prediction Using Anthropometric & Psychological Attributes of Athletes in The North Rift, Kenya 2017
20. Isolated Word Recogniser for the Swahili Dialect using Sphinx4-Neural Network Hybrid 2019

Ph D THESES:

Mbarara University of Science and Technology

1. Modeling multistage dynamics of immune response to malaria parasites within a human host and mosquito vector 2007

Makerere University

2. An Application of System Dynamics Modeling to Immunisation Policy Analysis 2008
3. Integration of System Dynamics and Action Research with Application to Higher Education Quality Management 2010

University of Western Cape

4. The Availability, Applicability and Utility of Information Systems Engineering Standards in South African Higher Education 2016

BOOKS-EDITORIAL WORK

Editor in Chief : Proceedings 2nd JOOUST International Conference 2019

Consulting Editor : At the Crossroads: ICT Policy Making in East Africa Eds Etta F.E. & Elder L. 2005 **IDRC** ISBN 9966-25-439-0 , ISBN 1-55250-219-8 (IDRC e-book)

Managing Editor : International Journal of Computing & ICT Research since 2006-2009 ICT for Sustainable Development Track.

Joint Editor : Strengthening the Role of ICT in Development 2007 Vol III Eds: Kizza J., Muhirwe J., Aisbett J., Getao K.W., Mbarika V.W., Patel D., & Rodrigues A.J., ISBN 978-9970-02-730-9.

Joint Editor : Strengthening the Role of ICT in Development 2008 Vol IV Eds: Aisbett J., Gibbon G., Rodrigues A.J. Kizza J.M., Nath R., & Renardel G.R. ISBN 978-9970-02-871-2.

Chair: Adhoc Committee of Senate to Edit JOOUST Policies Thirty Policies have been processed so far.

ADMINISTRATION & MANAGEMENT:

Director, Institute of Computer Science, University of Nairobi, 1985 to 1994.

Academic Section: Teaching and Research

Technical Section: University-wide Network & Computing Services;
Information Systems for University Management.

Director, Centre for Information Technology and Systems, University of Mauritius, Feb 1998 –Sep2001
Information Technology Services
Management Information Systems

Director, ICT Directorate , Bondo University College, September 2010 to date

RodriguesA.J: CV

Ag. Principal , College of Biological & Physical Sciences , Univ of Nairobi diverse dates from 1990- 2010 for periods of one week to 3 months.

Ag. Deputy Principal (Planning, Administration & Finance) Bondo Univ College , 25th -29th June 2012.

CURRICULUM DEVELOPMENT:

Bachelor of Science (Computer Science) - November 1991, Implemented 1992/1993.

Master of Science (Information Systems) - Conversion Course, 1991, 1996, 2001

Postgraduate Diploma in Computer System - Revised, 1991, 1994.

Master of Science (Computer Science) - Specialist Course 1996.

Master of Science IT with Management – Conversion Course 2000-Univ of Mauritius

Master of Science E-Business – Conversion Course 2000- Univ of Mauritius

Bachelor of Science (Computer Science & Information Systems) 2003-Univ. of Venda

Master of Science (Computer Science) - Specialist Course 2005

Summit on Curriculum Development, August 2010, Relevant Computer Science for Africa, Kla

BSc Computer Science SIIS JOOUST 2022

STAFF DEVELOPMENT:

University of Nairobi; Resource Mobilisation for overseas training, 1985 to 1994

Academic: 7 Ph.D. - ODA/TCT

1 Ph.D. - IDA

2 M.Sc. - ODA/TCT

Technical: 1 M.Sc. - ODA/TCT

1 H.N.D - IDA

Exchange Visits: 2 Academic, to U. K. for 6 technical staff for 3 months

In-house & On-the-job-training - Technical staff.

ADJUDICATION:

“ThinkQuest Africa Youth Camp and Award Ceremony” held in Cairo 25th- 28th September 2004.

SchoolNet Africa “Mtandao Afrika Youth Camp and Award Ceremony” held in Cairo 2-8 March, 2007

“African ICT Achievers Awards” East African Region & Africa 2008 6 – 10 October (Gauteng, SA)

CONSULTANCY

1. UNEP Data Processing Training for Managers. 1986.
2. COMMONWEALTH SECRETARIAT Kenya Case Study: Office Automation (AMREF) (1987).
3. MINISTRY OF TOURISM: Computerisation Plan (1987/88).
4. UNIVERSITY OF NAIROBI: Integrated Management Information Systems: 1988.
5. KENYA BUREAU OF STANDARDS: Microcomputer Training 1988.
6. IDRC: Deans of Graduate Studies, Application of Microcomputers for Administration. Oct 1989.
7. UNESCO - Informatics Studies in Higher Education 1990, 1993.
8. MINISTRY OF EDUCATION/POLICY PLANNING TASK GROUP: Specifications, Operational Requirements, Tender Evaluation for Supply of Computer and Related equipment. 1989 to 1994.
9. KENYA POSTS & TELECOMMUNICATIONS CORPORATION. Procurement guidelines 1993.
10. INTERNATIONAL DEVELOPMENT RESEARCH CENTRE: International Pre-Mission to advise the Democratic Alliance (ANC, COSATU, SANCO etc.) on an Information Policy for the Republic of South Africa. 1994.
11. KENYA GRAIN GROWERS CO-OPERATIVE UNION LTD: Tender Evaluation for Information Systems at KGGCU 1994.
12. GOVERNMENT OF KENYA/WORLD BANK: Cost and Financing of Education Studies. Access, Equity and Quality of Tertiary Education and Training. Study No. 3 1995. Tender No. 2/94-95.
13. HIGHER EDUCATION LOANS BOARD (HELB): Means Testing System-Implementation and Review. 1995.
14. GOVERNMENT OF KENYA/WORLD BANK: Bidding Documents & Technical Specifications for the Supply, Delivery, Installation and Support of a Computer-based Management Information System and Related Services for Kenyatta National Hospital. 1997.
15. MAURITIUS STANDARDS BUREAU: Bidding Documents and Technical Specifications for Electrical Installation for Computerization Project. 1999.
16. MAURITIUS STANDARDS BUREAU: Technical Evaluation for Electrical Installation for Computerisation Project 1999.
17. MAURITIUS STANDARDS BUREAU: Setting up an MIS Department. 1999.
18. DEVELOPMENT BANK OF MAURITIUS LTD: Bidding Documents and Technical Specifications for Structured Cabling Project. 1999.

19. UNIVERSITY OF MAURITIUS: Computer-based audit to determine unauthorised access to email accounts on the University mail Server 1999-2000
20. TERTIARY EDUCATION COMMISSION/University of Mauritius : Enterprise Resource Planning: Project Appraisal 2001
21. GOVERNMENT OF MAURITIUS: Task force on e-education and training , co-opted member March –August 2001
22. GOVERNMENT OF MAURITIUS: Task force on e-government , co-opted member March –August 2001
23. INSURANCE COMPANY OF EAST AFRICA : Information Technology Strategic Planning 2001
24. KENYA REVENUE AUTHORITY: Pre-qualification Tender Evaluation.; Supply and Implementation of an Integrated Customs Systems and Associated Consultancy Services. Tender no. KRA/HQs/62/2003-2004
25. UNITED NATIONS ECONOMIC COMMISSION FOR AFRICA: COMESA e-Strategy Study. July 2004.
26. UNIVERSITY OF NAIROBI ENTERPRISES & SERVICES : Development of Strategic Plan 2005-2010
27. PUBLIC UNIVERSITIES INSPECTION BOARD: ICTs in development: Contexts,Challenges and Interventions. December-January 2006
28. PUBLIC UNIVERSITIES INSPECTION BOARD: Information and Communication Technology Status in Higher Education Institutions in Kenya. December -January 2006

FUNDING FOR INFRASTRUCTURE/CAPACITY BUILDING & RESEARCH PROJECTS:

1. UNITED NATIONS EDUCATIONAL CULTURAL ORGANISATION (UNESCO)
Annual Support for Postgraduate Diploma in Computer Science. (Training & Equipment) US \$ 2,000 annually. 1985 - 1989.
2. GOVERNMENT OF KENYA/OVERSEAS DEVELOPMENT ADMINISTRATION (ODA).
Microcomputers in Teaching and Research (Equipment, Academic & Technical staff Scholarships and Study Visits) 3 years Joint Project for Depts. of Physics, Electrical & Electronic Engineering and Institute of Computer Science. 1988-1991. Capital Cost UK Pounds 256,000. Technical Co-operation UK Pounds 572,000. TCT awards 9 PhD academic staff, TCT awards 3 for technical staff. UK Pounds 300,000.
3. GOVERNMENT OF KENYA/WORLD BANK
Supply of a Replacement Computer for University of Nairobi. GOVERNMENT OF KENYA/IDA 5th Education Project Amendment EDUC/IDA/5/29/88-89.US \$ 1,900,000.
4. GOVERNMENT OF KENYA/WORLD BANK
Infrastructure Development - Site Preparation: Extension to Institute of Computer Science Building. GOVERNMENT OF KENYA/IDA 5th Education Project Ammendment EDUCA/IDA/5/29/88-89 Kshs. 4,700,000/-.
5. NATIONAL CASH REGISTER/UNIVERSITY OF NAIROBI
Donation of NCR Tower Model 32/400 5 workstations, Unix, suite of Software Kshs 1,600,000.
6. INTERNATIONAL DEVELOPMENT RESEARCH CENTRE (IDRC)
East and Southern Africa Network (ESANET). Regional Telematics Project, 1990-1993. Data Communications for Development. Canadian Dollars 148,070 (Project Leader).
7. GOVERNMENT OF KENYA/WORLD BANK
University Investment Project, sub-project: Provision for Computer Diagnostics Laboratory, Enhancement of University Network and a Library Automation System. US \$ 1,015,000.
8. UNESCO/ROSTA
Directory of Specialised Informatics Institutions and Informatics Personnel in Africa. 1992 US \$ 6000. Update 1994 US \$ 2000.
9. COMMONWEALTH SECRETARIAT
Regional Programme for Trainers of Information Analysts in Africa (REPTIAA). 20 participants yearly for 1 month, UK Pound 50,000 Yearly 1994, 1995, 1996.
10. GOVERNMENT OF MAURITIUS: Skills and Information Technology Development Fund, University of Mauritius Strategic IT Plan Project. 2000. MUR 1,500,000.
11. UNITED NATIONS ECONOMIC COMMISSION FOR AFRICA: ‘Software research in e-government: A pilot project for East Africa ’ IUCEA co-ordinated project : VarsityNet 2003-2004 US\$30,000
12. Primary Health Care Information System for Nomadic Communities. funding sought EU FP 7, WHO Ksh 60,000,000.
13. NATIONAL COUNCIL FOR SCIENCE & TECHNOLOGY Biodiversity Conservation and Poverty Alleviation through Sustainable use of water hyacinth in the Lake Victoria Basin, Kenya Thematic Area: Engineering Disciplines And Renewable Energy
4TH Competitive research grant 2011 Ksh 3,500,000.
14. NATIONAL SCIENCE FOUNDATION SCIENCE &TECHNOLOGY CENTRE WATERCAMPWS (Grant no. CTS-0120987). Addressing drinking water quality challenges in Developing countries-Case Study of Lake Victoria basin US\$50,000.-UoN-BUC jointly

15. REPUBLIC OF KOREA, Ministry of Science , ICT & Future Planning: ICT Development Cooperation Program; Establishing Information Centres 2018-2020 Expression of Interest JOOUST 2016
16. VLIR Strengthening JOOUST Capacity Building in Natural Resource Management , Food Security and Health. Project 4 Strengthening ICT Infrastructure to enhance Research, Teaching and Learning. 7,200,000 Euro extended concept
17. GOOGLE IRELAND Donation 2020 : 48 High End Power Edge Dell Servers ; 4 CISCO Catalyst 4948E-F switches; 1 Juniper router 1600. Est. Ksh 45,000,000/=.pre-owned.

EXTENSION TRAINING WORKSHOPS:

“Computing Awareness/Applications for Development/Management Information Systems”.

UNEP - 1986

School of Journalism - 1986

UNESCO/ANSTI: Engineering Education- Industry - 1986

IDRC - Workshop 1986

KEMRI - Workshop 1987

Kenya Computer Institute, 1988

Forum for Innovation and Incentives 1989

African Regional Organisation for Standardisation (ARSO) 1989

Kenya Bureau of Standards 1990

AITEC 1990

Commonwealth Secretariat - REPTIAA, 1994, 1995, 1996

Kenyatta National Hospital 1996.

University of Mauritius 1998.

Ministry of Lands 2006

Computer Literacy Training Bondo Community 2011

NACOSTI 2014 Community Briquette Production from Invasive Plant biomass: Kendu Beach Management Unit

ADMINISTRATIVE REPORTS:

1. Communication Requirements for the UNIVERSITY OF NAIROBI. Senate Report 1986 (MAY) Committee Chairman.
2. RE-ORGANISATION OF Personnel Structure at Institute of Computer Science:1985 (November).
3. PROPOSAL for New Computing Facility for the University of Nairobi, November 1986: Chairman - Computer Advisory Committee.
4. U-K visit: Study Tour *REPORT* (June 1987).
5. University-Library Automation Committee *REPORT* Chairman 1988.
6. Central Universities Bursary Board, *GUIDELINES* for Universities Bursary Secretariats. January 1992.
7. *ORGANISATIONAL RESTRUCTURING & Rationalisation of Positions*, Institute of Computer Science, University of Nairobi; March 1993.
8. *STRATEGIC ACTION PLAN: Headed for the next Millennium (1998-2003)*, Centre for Information Technology and Systems, University of Mauritius.
9. *INDUSTRIAL ATTACHMENT GUIDELINES: Dept of Computer Science and Engineering, University of Mauritius, 1998.*
10. Electrical Supply Committee *REPORT: Strategies to enhance the Quality of Power Supply at the University of Mauritius, 1998.*
11. *STRATEGIC PLAN (1999-2004): University of Mauritius, June 1999.*
12. *DISCIPLINARY COMMITTEE: Investigation, Draft Charges and Supportive evidence. A case of unauthorised access to email accounts. University of Mauritius, Jan 1999-September 2000.*
13. *PROPOSED STRUCTURE: Objectives, Resources & Cost Estimates. Virtual Centre for Innovative Learning Technologies, University of Mauritius, 2001-2004.*
14. *STRATEGIC PLAN : School of Computing and Informatics: 2005-2010*
15. *ICT INFRASTRUCTURE DEVELOPMENT PLAN 2010 Bondo University College*
16. *STATUTES Bondo University College 2011-05-12*
17. *STRATEGIC PLAN Bondo University College 2010-2015*
18. *TRANSITION OF BONDO UNIVERSITY COLLEGE TO FULL FLEDGED UNIVERSITY STATUS May 2011*
19. *ICT POLICY Bondo University College November 2011*
20. *STATUTES Jaramogi Oginga Odinga University of Science & Technology 2013-04-26*
21. *ICT POLICY Jaramogi Oginga Odinga University of Science & Technology, December 2013*
22. *CALENDAR Jaramogi Oginga Odinga University of Science & Technology, 2015 ongoing*
23. *PERFORMANCE EVALUATION: Deans/Directors/Librarian : Criteria and Scoring Form 2020.*
24. *REWARDING STUDENTS FOR ACADEMIC EXCELLENCE : Senate Policy 2020.*

PROFESSIONAL REPORTS:

RodriguesA.J: CV

1. Management Information STUDY: University of Nairobi 1988.
2. Supply of a Replacement Computer for University of Nairobi. TENDER NO. EDUC/IDA/5/29/88-89. GOK/IDA.
 - 2 (a) *OPERATIONAL REQUIREMENTS* - DEC 1988
 - 2 (b) *BIDDING DOCUMENTS*: International Competitive Bidding - June 1989
 - 2 (c) *TECHNICAL EVALUATION REPORT* 28/8/89
 - 2 (d) *TENDER EVALUATION REPORT* 26/9/89
3. University of Nairobi-Computer POLICY September 1990.
4. *COMMISSIONING REPORT*: Supply of a Replacement Computer for University of Nairobi. TENDER NO. EDUC/IDA/5/29/88-89. GOK/IDA March 1991.
5. PROVISION for: Computer Diagnostics Laboratory, Enhancement of University Network and Library Automation System - *OPERATIONAL REQUIREMENTS* GOK/IDA University Investment Project. June 1991
6. *TERMS OF REFERENCE* Management Information Systems & Consultancy for The COMMISSION FOR HIGHER EDUCATION. NOVEMBER 1991.
7. *TERMS OF REFERENCE* Information Systems Consultancy for The LOAN RECOVERY SCHEME. NOVEMBER 1991.
8. UNIVERSITY INVESTMENT PROJECT: GOK/IDA *TECHNICAL EVALUATION REPORT*.
 - i) MIS Consultancy for Student Loan Recovery Scheme. (EDUC/UIP/09/91-92).
 - ii) Microcomputers for Student Loan Recovery Scheme. (EDUC/UIP/10/91-92)
 - iii) MIS Consultancy for Commission For Higher Education. (EDUC/UIP/II/92-93).
 - iv) Supply of Computers & Related Equipment for:
University of Nairobi
Moi University
Kenyatta University
Egerton University
Maseno University College
EDUC/IDA/UIP/05/92-93
9. UNIVERSITY INVESTMENT PROJECT: GOK/IDA *BIDDING DOCUMENTS*:
 - * Management Information System Consultancy for Commission For Higher Education. (EDUC/IDA/UIP/11/91-92).
 - * Private University Studies, EDUC/IDA/UIP/16/92-93.
 - * Socio-Economic Study of Access to University Education, Performance, Equity and Gender Issues. EDUC/IDA/UIP/17/92-93.
 - * Graduate Labour Market Study, EDUC/IDA/UIP/18/92-93.
 - * Supply of Computers & Related Equipment.
10. UNIVERSITY INVESTMENT PROJECT: GOK/IDA *TERMS OF REFERENCE & OPERATIONAL REQUIREMENTS*:
 - * Computing Facilities for Policy & Planning Task Group (PPTG).
 - * Enhancement of the University of Nairobi Computer Network System.
11. KENYA GRAIN GROWERS CO-OPERATIVE UNION LTD. *TECHNICAL EVALUATION REPORT*: Information Systems for KGGCU LTD. 1994.
12. GOVERNMENT OF KENYA/WORLD BANK. *Cost and Financing of Education Studies*: Access, Equity and Quality of Tertiary Education and Training. Study No. 3. 1995. Tender 2/94-95.
13. HIGHER EDUCATION LOANS BOARD *MEANS TESTING SYSTEM REPORTS*: Financial, Control, Payment & Press. *STRATEGIC RECOMMENDATIONS*: Loan Application Processing. 1996.
14. HEALTH REHABILITATION PROJECT: GOK/WORLD BANK. *BIDDING DOCUMENTS & TECHNICAL SPECIFICATIONS*: Supply, Delivery, Installation and Support of a Computer-based Management Information System and Related Services for Kenyatta National Hospital. 1997.
15. MAURITIUS STANDARDS BUREAU: *BIDDING DOCUMENTS AND TECHNICAL SPECIFICATIONS*: Electrical Installation for Computerization Project. 1999.
16. MAURITIUS STANDARDS BUREAU: *TECHNICAL EVALUATION REPORT* for Electrical Installation for Computerisation Project 1999.
17. MAURITIUS STANDARDS BUREAU: *PROPOSAL* for setting up an MIS Department 1999.
18. DEVELOPMENT BANK OF MAURITIUS LTD: *BIDDING DOCUMENTS AND TECHNICAL SPECIFICATIONS* Structured Cabling Project. 1999.

RodriguesA.J: CV

19. TERTIARY EDUCATION COMMISSION/UNIVERSITY OF MAURITIUS: Computerization of Financial Management of TEC and TEIs. Enterprise Resource Planning :Project Appraisal. 2001.
20. KENYA REVENUE AUTHORITY: *Pre-qualification Tender Evaluation Report*.; Supply and Implementation of an Integrated Customs Systems and Associated Consultancy Services. Tender no. KRA/HQs/62/2003-2004
21. UNITED NATIONS ECONOMIC COMMISSION FOR AFRICA: "Software research in e-government: A pilot project for East Africa " IUCEA co-ordinated project : VarsityNet 2003-2004
22. UNITED NATIONS ECONOMIC COMMISSION FOR AFRICA: ' COMESA e-Strategy Study –Instruments ' August 2004
23. UNIVERSITY OF NAIROBI ENTERPRISES & SERVICES : Strategic Plan 2005-2010
24. PUBLIC UNIVERSITIES INSPECTION BOARD: ICTs in development: Contexts,Challenges and Interventions. January 2006
25. PUBLIC UNIVERSITIES INSPECTION BOARD: Information and Communication Technology Status in Higher Education Institutions in Kenya. January 2006
26. INTER UNIVERSITY COUNCIL FOR EAST AFRICA; ICT Education : Trends, Risks and Opportunities Editor(joint) : Report of the meeting of the specialised committee on ICT education in East Africa, November 2006.
27. UNIVERSITY OF NAIROBI: Upgrading of the University of Nairobi Primary Data Centre. Tender No UON/T/49/2006-2007. *TECHNICAL EVALUATION REPORT* June 2007.
28. BONDO UNIVERSITY COLLEGE Supply. Installation, Testing, Training of Users & Commissioning of ERP Software *EVALUATION REPORT tender no. BUC/A19/2011/2012*
29. JOOUST Procurement of Provision of 30Mbps Bandwidth from KENET . Report of the Evaluation and Negotiation Committee August 2016 PROC/PAF/T&N/12/8/2016
30. JOOUST Supply, Delivery, Installation, Testing and Commissioning of N-computing Set -up Report of Evaluation and Negotiation Committee JOOUST/PQ/NT/15/2017
31. JOOUST ERP Certificate of Completion & User Acceptance Check Lists 13th October 2017
32. JOOUST Final Performance Assessment of the ERP System as of Commissioning Date: 7th December, 2017.
33. JOOUST Supply, Installation, Testing, Training of Users & Commissioning of Web-based ERP Software Tender No JOOUST/PQ/ONT/004/2018/2019.
34. JOOUST Course Unit Coding system for all School Undergraduate Programmes 2019.

PROJECT MANAGEMENT :APPLICATION SOFTWARE DEVELOPMENT:

1. University of Nairobi - *Payroll System* Security, Monthly Reports, Cumulative Tax Reports. 1987.
2. *Computer Aided Personnel Information System* (CAPIS). 1989.
3. *Joint Admission Board System* (JAB): Principles and Procedures, Systems Analysis & Design. 1990.
4. *Computerised Undergraduate Registration and Examination System* (CURES). 1991.
5. *Management Information Systems*: University of Nairobi. 1987.
6. *Means Testing System* - Public Universities: Systems Analysis and Design. 1991.
7. *Planning, Programming & Budgeting System for PPTG*: System Analysis & Design. 1993.
8. *Loan Scheme Recovery Models*; Formulation and Simulation 1991, PPTG.
9. *Loan Scheme Funding & Subsidy Models*; Formulation & simulation 1994, PPTG.
10. *Means Testing System* - Higher Education Loans Board: Implementation Phase. 1995.
11. *Analysis and Design*: Computer-Based Management Information Systems, Kenyatta National Hospital 1997.
12. *Integrated MIS-Intranet*. University of Mauritius, 1998 -2001(Modules) Human Resource; Assets and Inventory; Admission and Nominal Roll; Student Information.
13. *ERP – Bondo University College/JOOUST 2011-todate Phased Implementation, Integration and Security Audit .*

CITATIONS:

- 1997 Marquis Who's Who in the World.
1997 Dictionary of International Biography, International Biographical Centre, Cambridge.
1998-99 Marquis Who's Who in Science and Engineering

SPORTING ACTIVITIES :

- 1962 Table Tennis Junior Champion, Uganda
1963 Uganda National Team; Table Tennis; All Africa Games, Alexandria
1964-70 Manchester University, 1st XI Hockey Team, and captain 1969
1969 Represented United Kingdom, Universities Athletic Union (UAU) 1st XI Hockey Team
1970 Elected to Manchester University UAU XXI Club (top twenty one sports persons in 1970)
1975 M.R.D'souza Hockey Gold Cup Kenya , Parklands Sports Cup(PSC) winners
1976 Squash : Division II, Nairobi Squash league
Winner Squash Handicap Tournament, PSC

REFEREES:

1. **Prof. Edward L. Robertson**
Computer Science Department, 101 Lindley Hall
Indiana University
Bloomington, Indiana 47405-4101, USA
Phone 812-855-3689 812-855-4829
2. **Prof. Barry Arthur Levine**
Computer Science Department
San Francisco State University
1600 Holloway Avenue
San Francisco, CA 94132, USA
[Barry Levine <levine@sfsu.edu>](mailto:levine@sfsu.edu)
3. **Prof G. Michael Schneider**
Dept. of Computer Science
1600 Grand Ave.
St Paul, MN 55105, USA.
schneider@macalester.edu
Olin 122 ·651-696-6458
4. **Prof. G. T. G Mohamedbhai**
Former Vice Chancellor , University of Mauritius
Reduit , Mauritius
g_t_mobhai@yahoo.co.uk