



## **ANI, COSMAS IKECHUKWU**

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### **Personal Data**

**Full Name:** ANI, Cosmas Ikechukwu  
**Department:** Electronic Engineering, University of Nigeria, Nsukka.  
**Contact Address:** Electronic Engineering, University of Nigeria, Nsukka, Enugu State, Nigeria.  
**E-mail Address:** [cosmas.ani@unn.edu.ng](mailto:cosmas.ani@unn.edu.ng)  
**Cell Phone No.:** +2347082049283  
**Date of Birth:** 14 March, 1954  
**Marital Status:** Married.  
**Nationality:** Nigerian.

### **Academic Qualifications**

#### **West African School Certificate (1971 - 1975)**

Attended Abor High School Abor, Udi LGA, Enugu State between 1971 and 1975. Obtained O' Level School Certificate.

#### **Dip. Aeronautical (1976-1978)**

Attended Nigeria Civil Aviation Training School, Zaria between 1976 and 1978. Obtained a diploma in Aeronautical Electronics and Telecommunication (AET).

#### **M.Sc. Degree (1980 - 1985)**

Attended Moscow Telecommunication Institute in former Soviet Union between 1980 and 1985. Obtained Master of Science degree in Automated Telecommunication with Distinction.

#### **M.Phil Degree (1989 - 1990)**

Attended Sussex University, England, United Kingdom between 1989 and 1990. Obtained Master of Philosophy degree in Computer Communication and Network.

#### **Ph.D. Degree (1992 -1995)**

Attended the University of Wales, Swansea, Wales, United Kingdom between 1992 and 1995. Obtained Ph.D degree in Communication Networks.

### **Work Experience**

#### **After Civil Aviation Programme**

Worked in the Ministry of Civil Aviation in 1979 as maintenance officer at the Ilorin Airport. Equipment maintained covered the range of equipment classed under instrument landing systems (ILS). During the period, I headed Aeronautic Navigation Instrument Installation Team that installed the Non-Directional Beacon (NDB) at Ajaokuta air-strip.

### **After M.Sc. Degree Programme (1986 - till present)**

I Work as Lecturer in the Department of Electronic Engineering, University of Nigeria, Nsukka, Nigeria.

My jobs as Lecturer entail Teaching and Research. The teaching aspect covers both the undergraduate and postgraduate courses delivery and laboratories; final year and postgraduate student project supervisions are included.

### **Consultancy**

1. I have equally acted, severally, as consultant to Nigeria Communication Commission (Abuja) on capacity building.
2. I have acted, severally, in the capacity of consultant to Shell Petroleum Development Company (SPDC) Ejeba, Warri on Telecommunication Corporate Training under Bit Streams Company Ltd.
3. I acted in several occasions as consultant to Digital Bridge Institute, Utako, Abuja on Telecommunication Corporate Training.

### **National Expert Committee Membership**

1. Member of National Committee on Spectrum Management 1999  
(Sponsored by Nigeria Communications Commission, Abuja)
2. Member of National Committee on Satellites to Promote Instructional and Research Experiments Projects - Team F1: Antenna Structures and Systems  
(Sponsored by Center for Satellite Technology Development, National Space Research and Development Agency, Abuja) 2007
3. Member Inter-Agency Committee of Evaluators of Telecommunications-based Research Proposals from the Academia.  
(Sponsored by Nigeria Communications Commission, Abuja) 2016

**Current Research interest** Telecommunication Networks Performance Management - Resource Management.

### **Research Concluded**

1. Development of Rare Event Probability Simulation Modeling Tool
2. Development of ATM Network Resource Allocation Template
3. Development of Nigerian Corporate Network Backbone Capacity Sizing Scheme

### **Research in Progress**

1. Development of Integrated ATM Network Performance Management System
2. Development of GSM Network Resource Allocation Template
3. Development of Optimum Handover Resource Reservation Scheme for LTE network

### **External Examination**

S/No	University	Department	Session/Programme
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1.	Enugu State University of Science and Technology (ESUT)	Department of Computer Science and Engineering	1999/2000; 2007/2008 Sessions (Undergraduate)
2.	Enugu State University of Science and Technology (ESUT)	Department of Electrical and Electronics Engineering	2002/2003; 2003/2004 & 2004/2005 Sessions (Undergraduate)
3.	Enugu State University of Science and Technology (ESUT)	Department of Electrical and Electronics Engineering	2003/2004 Session (Postgraduate Masters & PhD)
4.	Nnamdi Azikiwe University, (NAU) Awka, Anambra State	Department of Electronics Engineering	2001/2002 Session (Undergraduate) 2013 – Till date (Postgraduate Masters/PhD)
5.	Federal University of Technology Owerri (FUTO)	Department of Electrical/Electronic Engineering	2003/2004 Session (Postgraduate Masters)
6.	Federal University of Technology Minna	Department of Electronics Engineering	2014 – Till date (Postgraduate Masters/PhD)

### **Administrative Experience and Date**

1. Faculty of Engineering Associate Deanship 1995 -1997.
2. Department of Electronic Engineering Headship, 1999 – 2002; 2006 – 2008 and 2014 – 2016.
3. University Committee on Research Grant membership -1998 – 2000.
5. University Curriculum Committee Membership, 2008 – 2012.
6. University Research Grant Board Membership, 1999 – 2000.
7. ICT Structure in UNN Committee Membership, 2006.
8. Installation and Distribution of Computer Terminals to Faculties and Departments Committee Membership, 2000.
9. ETF Centre for Networking Co-ordinatorship, 2008 – till date.
10. Faculty Publication Board Associate Editorship, 1986 – 1988.
11. Faculty Entrance Board Membership, 1986 – 1987.
12. Faculty Representative in Senate, 2008 – to date.
13. Director, Computer Communication Centre, UNN, 2010 – 2012.

### **SCHOLARSHIP**

1. Nigerian - Soviet Union governments award 1979-1985
2. British Airways award 1989-1990
3. Commonwealth Universities award 1992-1995

### **SKILLS**

**Languages:**

Fluent in Russian Language

**Network Simulation Tools:**

Cadence Design System, COMDISCO BONES Designer Versions 2.0 2.5 and 2.6: and CACI

Network 2.5 versions 4.0-8.2, OPNET and MATLAB.

**High level Programming languages:** Basic, FORTRAN, Pascal, C and Turbo C.

### **PROFESSIONAL AFFILIATION**

Associate Member of Institute of Electrical Engineers (AMIEE).

Member of Nigeria Society of Engineer (MNSE).

The Engineering Council Register (United kingdom).

### **LATEST PUBLICATIONS (SINCE 2010)**

#### **BOOKS**

1. **C. I. Ani**, “Electrical Transmission Media & Antennas”, FIAC Press Enugu, Nigeria, 2010.
2. O. Okonor and **C. I. Ani**, “Beginners Choice for Learning Programming (C++ and Java)”, St. CIKO publishers, 2010.

#### **JOURNALS**

3. F. I. Onah, Mom Joseph and **C. I. Ani**, “Generalized Processor Sharing (GPS) Techniques”, Nigeria Journal of Technology (NIJOTECH), Vol. 29, No. 1, March 2010. pp 110 – 120.
4. **C. I. Ani**, “The Effect of Nigerian Factors on GSM Network Traffic Loading”, ELECTROSCOPE, International Journal for Electrical and Telecommunication System Research, November, 2010, Volume 4, Number 4, pp 93 - 97.
5. **C. I. Ani** and Ericsson E. Otavboruo, “Point Coordination Function WLAN Traffic Loadings”, Nigeria Journal of Technology (NIJOTECH), Vol. 29, No. 2, June 2010. pp 97 – 105.
6. **C. I. Ani**, “GSM Network Traffic Analysis”, Nigeria Journal of Technology (NIJOTECH), Vol. 29, No. 2, June 2010. pp 54 - 63.
7. N. S. Tarkaa, J. M. Mom and **C. I. Ani**, “Drop Call Probability Factors in Cellular Networks”, International Journal of Scientific and Engineering Research, Vol. 2, Issue 10, October 2011. pp 1 – 5.
8. J. M. Mom and **C. I. Ani**, “An Integrated Block-Oriented Simulation Model for Estimating Cell Loss Rate in ATM Networks”, Pacific Journal of Science and Technology, Vol.13, No. 1, 2012. pp. 287 – 291.
9. O. L. Daniyan and **C. I. Ani**, “Characterization of Nsukka, Nigeria Radio Space”, International Journal of Electronics and Communication Engineering, Vol. 5, No. 4, 2012. pp 498 – 503. ISSN 0974 – 2166.
10. E. E. Otavboruo, **C. I. Ani** & D. U. Onyishi., “Implementation of Static Threshold Schemes in a GPRS Radio Resource Template”, International Journal of Electronics and Communication Engineering (IJECE), Vol. 2, Issue 1, February 2013, pp. 105-114. ISSN 2278-9901.
11. Joseph M. Mom and **C. I. Ani**, “Application of Self-Organizing Map to Intelligent Analysis of Cellular Networks”, ARPN Journal of Engineering and Applied Sciences, Vol. 8, No. 6, June 2013, pp. 407 – 412. ISSN 1819-6608.

12. J. M. Mom, Nathaniel S. Tarkaa and **C. I. Ani**, “The Effect of Propagation Environment on Cellular Network Performance”, American Journal of Engineering Research (AJER), Vol. 02, Issue 09, September 2013, pp. 31 – 36. e-ISSN 2320 – 0847, p-ISSN 2320 – 0936.
13. Emechebe Jonas N, Otavboruo Ericsson E, **Ani C. I.** & Nzeako A. N, “Lightning Protection System: A Comparative Analysis Of Four Modified Models”, International Journal of Electronics and Communication Engineering (IJECE) ISSN(P): 2278-9901; ISSN(E): 2278-991X, Vol. 2, Issue 5, Nov 2013, pp. 195-204
14. F. I. Onah and **C. I. Ani**, “Application of Integrated Modeling Technique for Data Services resource Allocation in ATM Based Private WAN”, Nigeria Journal of Technology (NIJOTECH), Vol. 33, No. 1, January 2014. pp 72 - 77.
15. C. L. Anioke and **C. I. Ani**, “A Reservation and Retrial Queue Analysis for Cellular Networks”, International Journal of Engineering Research & Technology (IJERT) ISSN: 2278-0181; Vol. 3, Issue 2, February, 2014; pp 2691-2697.
16. Emechebe Jonas N, Otavboruo Ericsson E, Nzeako A. N & **Ani C. I.**, “Comparative Analysis Of Original And Modified Lightning Protection Systems”, International Journal of Electronics and Communication Engineering (IJECE) ISSN(P): 2278-9901; ISSN(E): 2278-991X, Vol. 3, Issue 2, Mar 2014, pp. 99-108
17. Emechebe Jonas N, Otavboruo Ericsson E, Nzeako A. N & **Ani C. I.**, “Comparative Analysis Of Original And Modified Lightning Protection Systems”, International Journal of Electronics and Communication Engineering (IJECE) ISSN(P): 2278-9901; ISSN(E): 2278-991X, Vol. 3, Issue 5, Sept 2014. J. N. Dike and **C. I. Ani**, “Algorithmic Analysis of an Efficient Packet Scheduler for Optimizing the QoS of VoIP Networks”, International Journal of Computer Applications (IJCA; 0975 - 8887), Volume 97, Number 4, (2014); ISBN: 973-93-80882-64-0, pp 5-12, Published by Foundation of Computer Science (FCS<sup>®</sup>), New York, USA.
18. N. S. Tarkaa and **C. I. Ani**, “On the Design of Next Generation Network Architecture for a Developing Economy”, American Journal of Engineering Research (AJER) e-ISSN : 2320-0847 p-ISSN : 2320-0936 Volume-03, Issue-05, May 2014, pp-193-202.
19. J. N. Dike and **C. I. Ani**, “Algorithmic Analysis of an Efficient Packet Scheduler for Optimizing the QoS of VoIP Networks”, International Journal of Computer Applications (IJCA; 0975 - 8887), Volume 97, Number 4, (2014); ISBN: 973-93-80882-64-0, pp 5-12, Published by Foundation of Computer Science (FCS<sup>®</sup>), New York, USA.
20. **Anioke C. L.**, **Nnamani O. C.** and **Ani C. I.**, “Call Drop Minimization Techniques for Handover Calls in Mobile Cellular Networks” International Journal of Scientific & Engineering Research, Volume 6, Issue 3, March 2015.
21. C. L. Anioke, C. O. Nnamani and **C. I. Ani** , “Review of Wireless MIMO Channel Models”, Nigeria Journal of Technology (NIJOTECH), Vol. 35, No. 2, April 2016. pp 381 – 391.

## **REFEREES**

1. **Professor Fred Halsall**,  
Department of Electrical and Electronic Engineering,  
University of Wales, Swansea,  
Singleton Park,  
Swansea SA2 8PP.  
United Kingdom.

2. **Dr. Kenneth Lam,**  
BT Laboratories,  
Martlesham Heath,  
IPSWICH,  
Suffolk IP5 7RE.  
United Kingdom.
  
3. **Professor C. C. Osuagwu,**  
Department of Electronic  
Faculty of Engineering,  
University of Nigeria, Nsukka,  
Enugu State,  
Nigeria

[Signd.]

**Professor C. I. Ani**