

# OKEKE, IJEOMA OLUCHUKWU

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## PERSONAL INFORMATION

**Date of Birth:** 26<sup>th</sup> December 1984  
**Gender:** Female  
**Nationality:** Nigerian  
**Marital Status:** Married  
**Contacts:** +2348067712855; *Skype id:* ijokeke  
**Area of Specialisation:** Digital Electronics



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## EDUCATION AND TRAINING

- **University of Aberdeen** **October 2014 - Date**  
*PhD in Electronic Engineering (in view)*
- **Delft University of Technology, the Netherlands** **September 2010 - September 2012**  
*M.Sc. in Computer Engineering*
- **University of Nigeria, Nsukka, Enugu State, Nigeria** **October 2009 - September 2010**  
*M.Eng. in Electronic Engineering (Digital Electronics)*
- **University of Nigeria, Nsukka, Enugu State, Nigeria** **March 2001 - July 2006**  
*B.Eng. in Electronic Engineering*
- **Federal Government Girls' College, Onitsha, Nigeria** **September 1994 – July 2000**  
*(West African Senior School Certificate-Ordinary Level)*

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## PROFESSIONAL EXPERIENCE

### *Employment Experience*

1. **University of Nigeria, Nsukka, Enugu State Nigeria** **October 2013 – Date**  
*Position:* Lecturer I, Department of Electronic Engineering  
*Responsibility:* Teaching and Mentoring Undergraduate Students
2. **University of Nigeria, Nsukka, Enugu State Nigeria** **September 2010 – September 2013**  
*Position:* Lecturer II, Department of Electronic Engineering  
*Responsibility:* Teaching and Mentoring Undergraduate Students
3. **University of Nigeria, Nsukka, Enugu State, Nigeria** **July 2008 - August 2010**  
*Position:* Graduate Assistant, Department of Electronic Engineering  
*Responsibility:* Assisted in teaching two undergraduate courses in electronic engineering, while pursuing graduate studies in the area of Digital Electronics
4. **Regina Pacis Modern Sec. School, Cross River State, Nigeria** **March 2007 - February 2008**

*Position:* National Youth Service Corps Classroom Subject Teacher

*Responsibilities:*

- a. Taught Introductory Technology to students in Junior Secondary classes 1-3
- b. Taught Physics to students in Senior Secondary classes 1-3

### ***Internship Experience***

**1. Nigeria Telecommunications Limited, Asaba, Nigeria**

**May – October 2005**

*Position:* Undergraduate Intern

*Responsibilities:*

- Tracing and verification of faulty subscriber lines
- Administrative assistance to the Territorial Manager

**2. Netherland Organization for Applied Scientific Research (TNO)**

**August – September 2011**

*Position:* Graduate Intern

*Responsibilities:*

- I performed an investigative research into the structural properties of the TNO Inventor's Network

### ***Volunteer Experience***

**National Youth Service Corps Community Development Services**

**July – December 2007**

- Constructing water drainage system for the local community
- Offering extra-mural lessons in physics and mathematics to disadvantaged students

## **SCHOLARSHIP AND AWARDS**

- The Netherlands Fellowship Program Scholarship (2010-2012) for MSc in Computer Engineering
- Commonwealth Scholarship for PhD Studies in Electronic Engineering (Sensor Networks)

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## PERSONAL SKILLS

- Excellent communication skills in the English language
- Functional programming & scripting skills in C, Java, Matlab, Visual Basic & Latex
- Functional knowledge of software tools: Modelsim, Xilinx ISE Design Suite

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## RESEARCH INTERESTS

- Wireless Sensor Networks, Digital Systems Design, Energy Management, Smart Grids

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## UNDERGRADUATE PROJECT SUPERVISION

- *Structural Analysis of an Existing Wireless Network: A Case Study of the UNN LIONET Network (2013)*
- *Structural Analysis of the Enugu Regional Power Grid (2013)*
- *VLSI-Based Design & Implementation of a 32-bit ALU (2013)*
- *VLSI-Based Design & Implementation of an Electronic Calculator (2013)*
- *Design & Implementation of a Remote Diesel-Level Monitoring System for GSM Base Stations (2014)*
- *A Java-based Application for CGPA Computation (2014)*
- *Design and Implementation of a Remote Controlled Home Automation System (2014)*
- *A Smart Street Light Management System (2014)*

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## PROFESSIONAL AFFILIATIONS

- Registered Engineer, Council for the Regulation of Engineering in Nigeria (COREN)
- Member Nigerian Society of Engineers (NSE)
- Member Association of Professional Women Engineers In Nigeria (APWEN)
- Member Institute of Electrical & Electronics Engineers (IEEE)
- Member Institute of Electrical & Electronics Engineers - Women In Engineering (IEEE-WIE )

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## PUBLICATIONS

1. **Okeke I.**, Allen A., Hendry D. and Verdicchio F. (2016). *Analysis of Processing Architectures for Wireless Sensor Networks*. In Proceedings of the 5th International Conference on Sensor Networks. ISBN 978-989-758-169-4, pages 129-136. DOI: 10.5220/0005735701290136
2. **I.O. Okeke**, A. E. Abu, R. C. Eze and O. N. Ezeanyagu, "*Wireless sensor network-based remote diesel-level monitoring system*," 2015 IEEE International Conference on Industrial Technology (ICIT), Seville, 2015, pp. 2209-2213. doi: 10.1109/ICIT.2015.7125423
3. O.V. Okoro, C.C. Osuagwu, **I.O. Okeke**, "*Analysis of an Intelligent Temperature Transmitter for Process Control*", Nigerian Journal of Technology (NIJOTECH) Vol. 34 No. 3, July 2015, pp. 582 – 590, <http://dx.doi.org/10.4314/njt.v34i3.22>

4. Udeze, C.C., Okafor, K.C., Okezie, C.C., **Okeke, I.O.**, Ezekwe, C.G., "*Performance Analysis of R-DCN Architecture for Next Generation Web Application Integration*," Adaptive Science & Technology (ICAST), 2014 IEEE 6th International Conference on, vol., no., pp.1,12, 29-31 Oct. 2014 doi: 10.1109/ICASTECH.2014.7068061
5. O.U Oparaku, F.N.Ugwoke, K.C Okafor, C.C Udeze, **I.O.Okeke**, "*A Novel Framework for Cloud Energy Metering System (CEMS) in Solar PV Plant*", African Journal of Computing & ICT (Afr J Comp & ICT), Vol 7. No. 2, June, 2014, pp15-26. ISSN 2006-1781.
6. K.C.Okafor, Ugwoke,F.N, C.C Udeze, **I.O. Okeke**, O.U. Oparaku, "*Design Specification for Cloud Energy Metering System (CEMS):Models ,Algorithms and Design Dimensions for Renewable Energy Grid*", African Journal of Computing & ICT (Afr J Comp & ICT), Vol 7. No. 2, June, 2014, pp 53-66. ISSN 2006-1781.
7. **I. O. Okeke** and O. N. Iloanusi, "*Towards Sustainable Energy Development in Nigeria: The Smart Grid Option*", Proceedings of the 4<sup>th</sup> Electrical Engineering National Conference on Energy Sources for Power Generation (ES4PG-2013), July 21-23, 2013, Department of Electrical Engineering, Faculty of Engineering, University of Nigeria, Nsukka, Nigeria. Pp.190-197.
8. O. V. Okoro, **I. O. Okeke** and C. C. Osuagwu, "*Efficient Energy Management through Energy Storage*", Proceedings of the 4<sup>th</sup> Electrical Engineering National Conference on Energy Sources for Power Generation (ES4PG-2013), July 21-23, 2013, Department of Electrical Engineering, Faculty of Engineering, University of Nigeria, Nsukka, Nigeria. Pp.128-137.
9. O. N. Iloanusi and **I. O. Okeke**, "*Prospects for the Deployment of Renewable and Sustainable Energy Sources in Nigeria*", Proceedings of the 4<sup>th</sup> Electrical Engineering National Conference on Energy Sources for Power Generation (ES4PG-2013), July 21-23, 2013, Department of Electrical Engineering, Faculty of Engineering, University of Nigeria, Nsukka, Nigeria. Pp.53-59.
10. C. A. Mosanya, J. O. Mbunwe, **I. O. Okeke**, S. O. Edeagu, O. N. Iloanusi, "*Centralized Smart Card-Based Access Control System*", International Journal on Communications Antenna and Propagation (IRECAP), Vol. 3, No. 3, June 2013, pp 152 – 157. ISSN 2039 – 5086.
11. S.O. Edeagu, **I. O. Okeke**, O. N. Iloanusi, "*An Embeded Biometric Attendance Management System*", International Journal of Management –Theory and Applications (IREMAN), Vol.1, No. 2, April 2013, Pp. 114-118, ISSN 2281-8588.
12. **I. O. Okeke**, '*The Influence of Network Topology on the Operational Performance of the Low Voltage Grid*', Master of Science thesis, Delft University of Technology, the Netherlands. September 2012.
13. **I. O. Okeke** and C. C. Osuagwu, "*Design and Evaluation of a Web-Based Courseware for Higher Institutions*," Proceedings of the 23<sup>rd</sup> International Conference of the Society for Information Technology & Teacher Education, March 5-9, 2012, Austin, Texas, USA. Pp. 2037-2043.
14. **I. O. Okeke**, '*Design & Evaluation of a Web-Based Courseware for Engineering Computer Programming*', Master of Engineering thesis, University of Nigeria, Nsukka. September, 2010.
15. **I. O. Okeke**, '*Design and Implementation of an Automatic Selector for Multiple AC Sources*'. Bachelor of Engineering thesis, University of Nigeria, Nsukka. July 2006.

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## REFEREES

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*Faculty of Engineering,*  
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