

Chinedu Innocent Nwoye

Strasbourg, 25 Rue de Lucerne, Strasbourg-76000, Grand East – France

📞 +33 (0)6 50 75 98 42 • 📠 +234 (0) 7033 812 496 • ✉️ nwoye.chinedu@gmail.com

A data scientist and academia with strong background in Machine Learning and Computer Vision. Experienced with text, image and video datasets. A proactive and creative researcher. Best described as a man of focus. Always passionate about improving team's productivity via automation. In addition to my studies, I am a software developer and a finance analyst.

Education & Academic Qualifications

- **PhD Medical Robotics** - Feb 2018 -
Supervisor : Asst. Prof. Nicolas Padoy
Thesis : Deep Learning Approaches for Surgical Tool Analysis in Endoscopic Videos Using Weak Supervision
Research Theme : Development of new tools and methods to perceive, model and analyse clinician and surgical activities in the operating room (OR) using computer vision and deep learning
Research Group : Computational Analysis and Modelling of Medical Activities (CAMMA)
Research Team : Automatics, Vision and Robotics (AVR) Strasbourg
Research Laboratories : iCube, IHU MixSurg Institute, iRCAD and Hopital Civil Strasbourg
Sponsor : ANR + BPI-CONDOR
Université de Strasbourg, France
- **MSc Artificial Intelligence - Distinction** 2016 - 17
Dissertation : Skin cancer Detection using Machine Learning and Computer Vision
Core Modules : Advanced machine Learning, Machine Learning, Computer Vision, Computational Finance, Image Processing, Intelligent Agents
Sponsor : NITDEF
University of Southampton, United Kingdom
- **MSc Computer Science - top 0.1% in the program** 2015 - 16
Dissertation : Staff Attendance System using Face Recognition Biometrics
Core Module : Operating Systems, Operation Research, Data Structure, Computer Architecture, Systems Analysis and Design, Digital Circuit Design
University of Nigeria, Nsukka (UNN), Enugu, Nigeria
- **BSc Computer Science - First Class Honours** 2008 - 12
Project : Billing Systems for a Mobile Telephone Network
Core Module : Computer Programming, Database, Expert Systems, Computer Networks, Algorithms
University of Nigeria, Nsukka (UNN), Enugu, Nigeria

Teaching & Research Experience

- **Pre-Doctoral Research** **Saarbrücken, Germany**
August 2017
Max Planck Institute for Software Systems (MPI)
 - In collaboration with the University of Maryland, USA and Cornell University, USA.
 - Deep learning, computational economics and machine learning, security and privacy, and natural language processing
- **Assistant Lecturer** **Enugu, Nigeria**
2016 - present
University of Nigeria, Nsukka
 - Computer Programming in Java: Taught 300 Second Year Undergraduate Students.
 - Programming in C++: Taught 300 Second Year Undergraduate Students.
 - Database Design and Implementation: Taught 80 Third Year Undergraduate Students.
 - Introduction to Computer Science: Taught approx. 1500 First Year Undergraduates.
- **Graduate Teaching Assistant** **Enugu, Nigeria**
2014 - 16
University of Nigeria, Nsukka
 - Assist in Computer Lab Demonstrations.

- Assist in Academic Research and Writings.
- Assist in Conducting Examination and Marking of Exams Scripts.
- Teaching Computer Science Foundation Course: Taught approx. 1500 First Year Undergraduates.

Science Teacher

Anambra, Nigeria

Disciples Secondary School, Onitsha

Jun 2008 - Dec 2008

- Mathematics and Physics: Taught approximately 100 College Students.
- Prepare 90 Students for GSCE examination. Recorded improvement from 45% to 82%.

Professional & Work Experience

Crew Member

McDonald's Food Restaurant, Southampton, UK

July 2017 - Jan. 2018

- Help in achieving customer's satisfaction through automated service delivery.

Student Ambassador

University of Southampton, UK

2016 - 2018

- Assisted in guiding and talking to students and parents at Open Days.
- Assisted in registering new students to the University File system and other Internet & infrastructural services.

Google Student Ambassador

Google

2010 - 12

- Teaching usage of Google apps.
- Assist in organizing Google fairs where new apps are introduced.
- Participated in the Google language translation that brought the use of Pidgin English to the Google search engine.
- Participated in Google mapping at the University of Lagos, Nigeria.
- Key role presenter at Google Powered Academy in Nigeria with 1200 audience.

Skills

- o **Technical:** Deep learning, Data Mining techniques, Machine learning, Image processing, Computer Vision, Biometrics, AI search programming, Computational Finance, Data visualization, Computational Medicine, Medical data analysis, Game Programming, Graphics design, Desktop applications development, iOS and Android applications development, Website design, hosting and management, etc.
- o **Code:** Python, Java, MATLAB, C++, Prolog, Android, PHP, JavaScript, HTML, CSS, Ajax, XML, MySQL, etc.
- o **Packages and Libs:** Tensorflow, Keras, pyTorch, Caffe, TFRL, OpenAI, Theano, OpenCV, OpenImaj, Bootstrap, etc.
- o **Database:** SQL, MongoDB, Oracle.
- o **OS:** Linux, Mac, Windows, Android.

Selected Publications & Conferences

- Nwoye, C.I.**, Mutter, D., Marescaux, J., & Padoy, N. (2018). Weakly Supervised Convolutional LSTM Approach for Tool Tracking in Laparoscopic Videos. arXiv preprint arXiv:1812.01366.
- Nwoye, C.I.** & Mahmoodi S., (2018) "Skin Cancer Detection Using Convolutional Neural Networks with Random Forest." *Submitted to Computerized Medical Imaging and Graphics Journal.*
- Nwoye, C.I.**. (2016) "Enhancing Attendance Management in Firms and Industries Using Fingerprint Biometric Recognition Technique.!" IOSR Journal of Mobile Computing & Application (IOSR-JMCA). e-ISSN: 2394-0050.
- Ezema, M.E., Alabekee, C.V., Ishiwu, V.N., NwosuArize, I. & **Nwoye, C.I.**. (2016) Cryptography and Cryptosystem a Panacea to Security Risk in Wireless Networking. ICWCMNC 2016: 18th International Conference on Wireless Communications, Mobile Networking and Computing, At New York, USA, Volume: 3. No. 10.
- Udanor, C.N., & **Nwoye, C.I.**, (2016) "Motivation for the Design and Implementation of a SMS Slang Converter for Android Devices." International Journal of Interactive Mobile Technologies (IJIM) 10.1 pp: 4-12.
- Agu, M.N., & **Nwoye, C.I.**, (2016) "Maintenance of Text Message Confidentiality Using Android Platform." Transylvanian Review 24.7.
- Agu, M. N., **Nwoye, C.I.**, & Ogbuokiri, B.O., (2015) "Enhancing Courier Service with the Development of an Interactive Mobile App in Android Platform.!" IOSR Journal of Mobile Computing & Application (IOSR-JMCA). e-ISSN: 2394-0050.
- Ogbuokiri, B.O., Agu, M.N. & **Nwoye, C.I.**, (2015) 'A Model for Identity Verification in Nigerian E-Governance: The "I Devsoft"'. The 2nd Covenant University Conference on e-Governance in Nigeria – CUCEN, Covenant University.

Google Scholar Presence: <https://scholar.google.co.uk/citations?user=8zL9G0QAAAAJ&hl=en>

Research Gate Presence: https://www.researchgate.net/profile/Chinedu_Nwoye

Volunteering

- **Computer Administrator**
 - *Kaiama Local Government Secretariat, Nigeria* Feb 2013 - Feb. 2014
 - Work as a corps member in charge of IT works and systems maintenance and management during Nigeria National Youth Service Corps (NYSC).
 - Executed a rural project, built a computer learnig center installed with 50 computers & internet access, sponsored by Kaiama LGA.
 - Successfully taught approx. 170 kids in the rural areas, the basic use of computer and internet.

Awards and Honours

- **IPCAI Audience Choice Award - First Place** 2019
The best paper presentation award at the 10th IPCAI conference, Rennes, France. Sponsored by Philips
- **NITDA Post-Graduate Scholarship -** 2016
A fully funded scholarship for Master's degree education sponsored by National Information Technology Development Fund (NITDEF), Nigeria
- **Best Graduating Student -** 2012
Department of Computer Science, University of Nigeria, Nsukka
- **Merit Award for Academic Excellence -** 2011
MTN Foundation Science and technology Scholarship Scheme
- **Merit Award for Academic Excellence -** 2010
Etisalat Telecommunication Service Limited

Extra-curricular interests

- **Education:** Innovation, Interrogative reasoning and Counter learning.
- **Sports and games:** Chess, Volley ball, squash, swimming, dancing, travelling for tourism.
- Human networking and philosophical debate

Languages

English, Igbo & French

Positions of Responsibility

- **Workshop Organising Committee member -** *Eucor Cross-border seminar between France and Switzerland* 2018-19
- **Coordinator of Evangelism -** *Leading students evangelical society* 2010-11
- **Laboratory Prefect -** *In-charge of students access & usage of Chemistry and Physics laboratories in college* 2007-08
- **President of YCSN -** *Leading Young Catholic Student of Nigeria (YCSN) in organising religious educational programs* 2007-08
- **President of Press Club -** *Leading college students' journalism* 2005-07

References

Dr. Engr. Collins Udanor
collins.udanor@unn.edu.ng
University of Nigeria, Nsukka

Asst.Prof. M.N. Agu
monica.agu@unn.edu.ng
University of Nigeria, Nsukka

Prof. Mahesan Niranjana
mn@soton.ac.uk
University of Southampton, UK

Dr. Richard Watson
r.a.watson@soton.ac.uk
University of Southampton, UK

Prof Adam-Prugel Bennett
apb@soton.ac.uk
University of Southampton, UK

Asst.Prof. Nicolas Padoy
npadoy@unistra.fr
University of Strasbourg, France