

# Akinlabi Emmanuel Olutayo

---

18, Akinlabi Street, Ereko Quarters, Ibafo, Ogun State, Nigeria.  
Tel: +234-7063495541, mobile: +491 5214596238  
Email: akinlabi.e.olutayo@aims-senegal.org

## Education

2015 - 2016 **Masters in Mathematical Sciences**, African Institute for Mathematical Sciences, Senegal,  
Overall grade: Distinction.

### Masters' Thesis

Thesis Title: *Simulation of Cerebrospinal fluid (CSF) flow with Finite Pointset method (FPM)*

Supervisors: Dr. Almut Eisentraeger & Dr. Joerg Kuhnert (Fraunhofer Institute for Industrial Mathematics ITWM, Germany)

Description: *The thesis explored how CSF flow and the nervous tissue can be modelled as a poroelastic material. Further interesting aspects arise due to the rigid enclosure of the brain by the skull and the pressure oscillations originating in the large arteries of the brain. The aim of the project was to examine in a simplified geometry, how this system can be simulated with the Finite Pointset Method in its current form or where new developments would first be necessary.*

2008 - 2014 **Bachelor of Technology (Mathematics)**, Ladoko Akintola University of Technology, Nigeria.  
Second Class Upper Division (Honours)

### Bachelors' Thesis

Thesis Title: *Non-Linear Hydromagnetic Convection at a continuous moving surface Using Weighed Residual Method*

Supervisors: Dr. Oderinu & Prof. F.O. Akinpelu

Description: *This thesis explored the idea of using Weighted Residual Method to solve Non-linear Coupled Partial Differential Equation generated from Hydromagnetic Convection.*

2000 - 2006 **West African Senior School Leaving Certificate**, Lighthouse International Secondary School, Nigeria.

## Experience

April 2016 - **Research Assistant**, Fraunhofer Institute for Industrial Mathematics, Germany.

May 2016 **Duties/Responsibilities:**

- o Assist with the development and implementation of projects using FPM solver.

November **Subject Teacher (Mathematics)**, Edo Boys High School, Nigeria.

2014 - **Duties/Responsibilities:**

- o Teaching Mathematics to Junior Secondary School Classes (ages 11-13).
- o Marking and recording of final tests and examinations.
- o Coordinating the Mathematics Club of the School.

July, 2011– **Industrial Training**, *Best Legacy College of Education*, Nigeria.

March 2012 **Duties/Responsibilities:**

- Teaching Courses like Real Analysis, General Mathematics, Problem-solving to 1st and 2nd year undergraduate students.
- Marking and recording final tests and examinations.
- Coordinating the Mathematics Club of the Institution.

## Awards

March, 2013 MUSTE Undergraduate Scholarship by Jim Ovia foundation, Nigeria

April, 2014 Faculty Prize for the Best Graduating Student in the Department of Pure and Applied Mathematics by Ladoke Akintola University of Technology Governing Council, Nigeria

May 2014 Gold Medalist in National Mathematics Competition for University Students (NAMCUS 2014) by National Mathematical Centre (NMC), Nigeria.

August, 2015 Full Masters' Scholarship by Next Einstein Initiative at African Institute for Mathematical Sciences, Senegal

## Professional Qualification and Certifications

October, 2015 Nigerian Institute of Management (Chartered) **Proficiency in Management**

November, 2015 Modeling and Simulation using MATLAB - Statement of Participation (iversity) [www.iversity.org/verify/OcGMQL](http://www.iversity.org/verify/OcGMQL)

January, 2016 Foundations of Teaching for Learning 1: Introduction by Common-wealth Education Trust (Coursera) [www.coursera.org/account/accomplishments/verify/DWFZDM4RAFGR](http://www.coursera.org/account/accomplishments/verify/DWFZDM4RAFGR)

February, 2016 Model Thinking by University of Michigan (Coursera) [www.coursera.org/account/accomplishments/verify/EHL2RGZ5DRQS](http://www.coursera.org/account/accomplishments/verify/EHL2RGZ5DRQS)

February, 2016 Establishing a Professional Self through Effective Intercultural Communication by National University of Singapore (Coursera) [www.coursera.org/account/accomplishments/verify/LALARK4LWLML](http://www.coursera.org/account/accomplishments/verify/LALARK4LWLML)

March, 2016 Dynamical Modeling Methods for Systems Biology (Coursera) <https://www.coursera.org/account/accomplishments/verify/TJT4Z2CX6QQ4>

## Technical skills

Mathematical modeling, Numerical Simulation, Problem-solving, Leadership, Creativity, Logical thinking

## Computer skills

Advanced Microsoft Office suite

Intermediate PYTHON, R,  $\text{\LaTeX}$ , MATLAB, SCILAB, RACKET, Linux, Microsoft Windows

## Research Schools/Symposiums attended

1st - 12th August 2016 **African Mathematical School, Nigeria** *Sponsored by: CIMPA and London Mathematical Society*

4th - 6th July, 2016 **CiM-IMPRS Graduate School Symposium, University of Munster, Germany**

14th - 15th April, 2016 **Young Researchers' symposium (YRS 2016) Fraunhofer - Zentrum Kaiserlautern, Germany**

## ———— Languages

Yoruba **Native**  
English **Fluent**  
French **Basic**

## ———— References

Dr. Almut Fraunhofer Institute for Industrial Mathematics, Germany Tel: +49 631 31600-4767  
Eisentraeger Email: almut.eisentraeger@itwm.fraunhofer.de  
Prof. Aissa African Institute for Mathematical Sciences, Senegal Email: aissa.wade@aims-senegal.org  
Wade