

# CURRICULUM VITAE

## GENERAL INFORMATION

**Name** Charles Chijioke Onu  
**Date of Birth** 18<sup>th</sup> October, 1989  
**Address** 1514 avenue Docteur-Penfield, Montreal, H3G 1B9, Canada  
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## OVERVIEW

Charles holds a Bachelor's degree in Electronics and Computer Engineering; majoring in Software Engineering. He has over 4 years experience developing enterprise systems on .NET Platform; android mobile applications in Java and machine learning solutions on MATLAB and Python. He is passionate about applications of data science and intelligent systems in healthcare.

## EDUCATION

- Institution** **McGill University**  
Degree MSc in Computer Science (Machine Learning), 2016 - 2018
- Institution** **Federal University of Technology, Owerri (FUTO), Nigeria**  
Degree Obtained Bachelor In Electronics and Computer Engineering, [2006 – 2011].  
Class of Degree Second Class – Upper (4.23/5.00)  
Awards
  - Best Graduating Student, 2011
  - The Shell Petroleum Development Company of Nigeria (SPDC), University Scholarship, 2008Project Design and implementation of a Web-based Library Management Software using Biometrics (fingerprint) for user authentication (2011).  
Research Automatic detection of pathologies in newly born babies from cry sound using Neural Networks (2011).
- Institution** **Bellina College, Akoka, Lagos**  
Degree Obtained Secondary School Leaving Certificate, 2005  
Grade 7 Distinctions including Mathematics, English, Physics and Chemistry.  
Awards Best Graduating Student
- Institution** **Our Lady of Fatima Nursery and Primary School, Lagos**  
Degree Obtained Primary School Leaving Certificate, 1999

## EXPERIENCE

- 1 Organisation** **McGill University via Jeanne Sauvé Foundation**  
Period July, 2015 – May, 2016 (current)  
Role Visiting Fellow/Graduate Research Trainee  
Comments Charles is one of 12 Fellows selected globally to participate in Jeanne Sauvé Public Leadership Program (JSPLP). Presently, he works jointly with the **Centre for Engineering in Society** at Concordia University, and the **Reasoning & Learning Lab** at McGill University. ([www.jeannesauve.org/scholar/charles-ONU](http://www.jeannesauve.org/scholar/charles-ONU))
- 2 Organisation** **Fisher Foundation for Sustainable Development in Africa**  
Period September, 2013 – present  
Role Data Scientist and Software Engineer  
Comments Head of healthcare-based technology project that applies machine learning in a mobile app for diagnosis of birth asphyxia using the newborn cry.  
[www.ubenwa.com](http://www.ubenwa.com)
- 3 Organisation** **CypherCrescent Limited**  
Period April, 2012 – June, 2015  
Role Software Engineer  
Comments Worked with team involved in the design and development of .NET-based engineering software for analytics, intelligence, advanced visualization and data management in the Oil and Gas Industry.
- 4 Organisation** **Synchrony Limited, Lagos**  
Period September 2010 – December 2010  
Role Software Developer [internship]  
Comments Internship during which he was responsible for maintaining and improving existing enterprise software developed on the .NET platform.
- 5 Organisation** **Digital Bridge Institute (DBI), Abuja**  
Period June, 2010 – August, 2010  
Role Software Engineer [internship]  
Comments A 3-month task-based internship during which he:
  - Implemented a Web-based Software for Biometric Staff Attendance (C# & ASP.NET)
  - Designed an electronic Newsletter (PHP & MySQL)
  - Evaluated and proposed a re-design of the organisation's intranet
  - Set-up an open-source Document Management System for the Institute

## SKILLS AND ABILITIES

Charles possesses strong Engineering and analytical skills, and is proficient in Desktop and Web Development on the .NET Framework. He also has significant experience in mobile development (Android), and scientific computing, using Python and MATLAB.

<b>Platforms</b>	Visual Studio, Eclipse IDE, MATLAB
<b>Languages</b>	C#, Java, Python, PHP, ASP.NET
<b>Databases</b>	SQL Server, MySQL, Microsoft Access
<b>Office Applications</b>	Microsoft Excel, PowerPoint, Project, Word

## Awards and Honours

- Associate Fellow of Royal Commonwealth Society, 2016
- Best Research Award, Machine Learning in Healthcare, Neural Information and Processing Systems (NIPS) conference, 2015

## CONFERENCES AND PAPERS

- Speaker at Walrus Talks *Africa's Next Generation*, 2016. Topic: "Social Innovation in Africa: A Personal Narrative"
- Onu C. C. "Harnessing Infant Cry for Swift, Cost-effective Diagnosis of Perinatal Asphyxia in Low-resource settings". Lightning Talk given at: IEEE Global Humanitarian Technology Conference (GHTC) 2014 October 10 - 13, San Jose, California.
- Onu C. C. "Harnessing Mobile Technology in the Diagnosis of Perinatal Asphyxia". Poster presentation at: UNESCO 3<sup>rd</sup> International Conference on Technologies for Development: What is Essential? 2014 June 4 – 6. Lausanne, Switzerland.

## PROFESSIONAL CERTIFICATES

- Microsoft Certified Technology Specialist (MCTS): Web Application Development, 2010
- Microsoft Certified Technology Specialist (MCTS): .NET Application Development, 2010

## PROFESSIONAL AFFILIATION

- Institute of Electrical and Electronic Engineers (IEEE)
  - Computational Intelligence Society
  - Computer Society
- Nigeria Internet Group (NIG)

## LEADERSHIP

As a student, Charles successfully held several challenging leadership positions:

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|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1 Organisation</b> | <b>Students In Free Enterprise (SIFE), Federal University of Technology Owerri (FUTO)</b>                                                                                                                     |
| Role                  | Team Leader/President [2010/2011]                                                                                                                                                                             |
| Responsibility        | Coordinated the activities of a team of over 80 student volunteers involved in developmental projects aimed at addressing social, economic and environmental challenges in the University's host communities. |
| <b>2 Organisation</b> | <b>Nigerian Universities Engineering Students' Association (NUESA), FUTO</b>                                                                                                                                  |
| Role                  | Head, Technical Committee [2009/2010]                                                                                                                                                                         |
| Responsibility        | Coordinated several innovative projects among Engineering Students in the University.                                                                                                                         |
| <b>3 Organisation</b> | <b>Society Of Electrical/Electronic Engineering Students (SEES), FUTO</b>                                                                                                                                     |
| Role                  | Public Relations Officer [2008/2009]                                                                                                                                                                          |
| Responsibility        | Served as the main interface between the Department and the Industry. He was also responsible for the development and production of the Department's annual magazine.                                         |