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## *Iyalla John Alamina, MIET*

<b>Career Objective</b>	Looking out for a role as a Mid/Senior Software Systems Developer/Software Architect/Integrations Expert/Machine Learning engineer/Data Scientist. Current Job Role interests include Solution Architect, System Integration Expert
<b>Core Interests</b>	<ul style="list-style-type: none"> <li>• Machine Learning</li> <li>• Electronics and control systems</li> <li>• Object Oriented Programming: C++, PHP, Python, Java etc.</li> <li>• Software Testing and Engineering.</li> </ul>
<b>Ongoing/Future Publications</b>	<ul style="list-style-type: none"> <li>• A Deep Scattering end-to-end model for speech recognition</li> <li>• LSTM Language Model for the Wakirike Language –</li> </ul>
<b>Core Competencies</b>	<p>Adept system architect, Systems Integration and end-to-end solutions engineer, agile software project specialist, data analytics/transformations expert with over 10years of professional experience.</p> <p>Control Systems and Instrumentation Engineering, Embedded solutions development, Computer/Network Systems Engineering and Integration. Competency in Windows, and Linux/Unix server infrastructure, Linux scripting, Perl, PHP, Python and Bash.</p> <p>Proficiency in various software platforms ranging from enterprise solutions using PHP MVC, Cake PHP, Laravel, Code igniter, SAP Business one, Web Solutions using HTML, Javascript, JQuery, AngularJS, KnockoutJS, WordPress, Joomla, Ruby on Rails, JavaEE, ASP.NET MVC, Web API, Vector Graphics, Image editing (Photoshop) to Hardware Data acquisition, analysis and control using Matlab and National Instruments LabView, Distributed Control Systems, industrial PLC and CNC machines to server, desktop, mobile applications and data-centric solutions.</p> <p>Experienced expertise in mobile phone development and mobile systems development. Database server expertise include MySQL, Oracle, MSSQL</p>
<b>C++ Projects</b>	<ul style="list-style-type: none"> <li>• Development of C++/Python/Perl/Bash based Automatic Speech Recognition engine using Kaldi and Sphinx4 systems. Research Project Carried out at the University of Huddersfield</li> <li>• Development of a 2/3D Laser profile software toolset. Computer based laser analysis and diagnosis tool using OpenCV and QT C++ [Master's degree Project]</li> <li>• Development of Drivers for various embedded subsystems using C/C++/python as part of work done as <b>Electronics Design/Embedded Systems Developer (Part Time) @ Phoenix Material Testing (see below)</b></li> <li>• Use of COM/COM+/DCOM objects for interfacing with embedded/Mobile and desktop (C#/LabView)</li> </ul>
<b>Education</b>	<p>2015-2020 - <b>Ph.D Informatics and Natural Language Processing.</b> University of Huddersfield, Queensgate, Huddersfield, HD1 3DH, England, United Kingdom.</p> <p>2013-2014 - <b>M.Sc. Engineering Control System and Instrumentation.</b> University of Huddersfield, Queensgate, Huddersfield, HD1 3DH, England, United Kingdom.</p> <p>2001-2006 - <b>Bachelor of Technology, Computer Engineering</b></p>

**Professional  
experience**

**July 2020-Sep 2020: Greenfield Embedded integrated Software Design/ Consultation (C#,C++). BillTech-mechatronics Limited, Wolverhampton, United Kingdom**

- Design and implementation of an embedded controller software and integrated PC interface using C++ and C#.
- Software Project management using Jira and Agile and Test-driven methods.
- Development of product architecture using UML strategy and modern software design patterns.

**Sep 2019-Oct 2019: Mid-Senior PHP Laravel Developer, Netsells Limited, York (Full time)**

- Laravel Back-end Data-Driven site upgrade for Harold-Pinter for the University of Leeds.
- Internal DevOps, Laravel-integrated Continuous Integration and Deployment tools upgrade for Internal Websites management (TDD strategies deployed).
- Full-stack Laravel support Developer for Rail-Guard delay-repay portal for the TrainLine company product offering B2C mobile app and B2B Streaming, Messaging Queue and Microservices architecture with AWS integration.
- Test Driven Development of Software output.

**Jan 2020-Apr 2020: Freelance Consultation (Node/Flutter/Dart)**

- Freelance NodeJS consultation for Banking sector application
- Development of Flutter Application for Train schedule tracking using Open Rail Data API
- Development of Neural network/Software Design pattern workshop for Developer network
- Part-Time Architect/Developer Farm-Agro products portal – Using Python Django/ReactNative

**Dec 2018-Mar 2019: Electronics Design/Embedded Systems Developer (Part Time). Phoenix Material Testing, Unit 8, The Wallows Industrial Estate, Fens Pool Avenue, Brierley Hill, West Midlands, DY5 1QA**

- Design and implementation of Embedded System Circuits using Altium designer.
- Routing of Electronic circuit boards using Altium designer
- Preparation of BOM using Altium designer and MS Excel
- Management of Embedded projects using Microsoft Project
- Development of Drivers for various embedded subsystems using C/C++,Lua and python.
- Desktop PC integration and testing apparatus developed with C#
- Use of Mbed and Keil platform for development of Embedded firmware
- Development of various state machine and other algorithms for embedded firmware.
- Development of Embedded Circuit Testing systems
- Analysis and design of embedded systems used for various material testing systems.
- Implementation of Agile mechanisms for management of embedded projects.

**Sep 2017- Jan 2019: Software Engineering Laboratory Tutor (Part time), Computing and Engineering, University of Huddersfield, United Kingdom.**

- Development of Curriculum for Undergraduate and Post Graduate Study for Web and Machine Learning Technologies.
- Preparation of Laboratory Demonstration for software Technologies include, C#, ASP.NET Core MVC, ASP.NET Core Web API, Entity Framework, Keras, Matlab, python, SQL server, MySQL, ASP.NET web forms, TensorFlow, ScikitLearn
- Courses Taught include: Undergraduate database applications and post graduate machine learning series.
- Interacting with students, assisting with answering questions and motivating them to get the best from their laboratory work.

**Oct 2018- Dec 2018: Mid-Senior ASP.NET Core Web Application Developer (Full-time contract), Rocket Horse Limited, Second Floor, Platform Building, Leeds.**

- Development and extension of the popular pub quiz hosted application called KWIZZBIT. [www.kwizzbit.com](http://www.kwizzbit.com)

- Technologies include, C#, ASP.NET Core MVC, ASP.NET Core Web API, Entity Framework, Moq, NUnit, Service-Decorator pattern, Python Scripting, Test automation, ReactJS, HTML, CSS, JQuery, Elastic Bean Stalk Integration
- Full Stack Web Portal using JavaScript and ASP.NET technology stack
- Agile Style Development, TDD
- AWS Integration and application management
- MySQL, Dependency Injection, AutoMapper, Redis Cache, SignalR

**Aug, 2018- Sep 2018: ASP.NET, KeyIVR Technologies Limited (Full Time contract), Yorkshire Way, Doncaster.**

- Development of C#, ASP.NET Core Web APIs on top of existing Interactive Voice Response solution.
- Integration of bespoke web and intensive data driven C# solutions on existing Car Parking Database
- SQL Server 2014/2017 Enterprise Database administration
- Maintenance of Existing ASP.NET web forms web sites for customer management and technology integration.

**Nov, 2017- December 2019: Mid-Senior PHP Web Solutions Developer (Part Time), Planning and Information Services Department, Office of the Vice Chancellor, University of Huddersfield, HD1 3DY.**

- Requirements Analysis, System Design and implementation
- Implementation of MySQL Database
- Full Stack Web Portal using JavaScript and PHP MVC frameworks + C#.Net Blazor/Razor front-end
- System Architecting + Development of CI/CD pipelines + Test Driven Development

**Oct – Dec 2017: Development of Workload balance of Academic Staff of the School of Computing and Engineering, University of Huddersfield. (Freelance Consultation)**

- Angular 2 , 4 and VueJS used at various stages of the application
- Full Stack Web Portal using C#, ASP.NET web API, Entity framework frameworks

**July – Aug 2017: Development of Wakirike Dictionary and Diacritics Data Collection System, University of Huddersfield.(As a part of my research projects)**

- Angular 2 , 4 and VueJS used at various stages of the application
- Diacritics Croud Sourced Big data collection mobile/web-based application developed using Angular 4 and VueJS
- Full Stack Web Portal using ASP.NET web API, Entity framework frameworks

**Sep 2012- July 2013: Rivers State Sustainable development Agency, 1 Igbodo Street, Port Harcourt (Full time)**

- **Information Technology Support Officer.**
- Applications Server Administrator, Computer networks and sip telephony networks administrator.
- Web-server Administrator, RSSDA Corporate Web Site.

**Jan 2009- May 2012: Cinfores Nigeria (Full time) Limited Trans Amadi Gardens, Port Harcourt**

- Design and Implementation Electronic Testing platforms from conception, project management, project documentation and Project Execution.
- Web and Application Developer for Scholarship management System, Lecture Scheduler, Data migration. Integration of SMS server for software product activation.
- Design and implementation of Payment System for Ministry of Finance.
- Design of Biometric Solutions for electronic-testing and Human Resource control.
- Design of Enterprise Network/System maintenance/security policies, procedures and processes.
- Technology stack included use of C#, C++, Java, Django (python), PHP and ASP.NET web forms.

**Oct 2008- January 2009: KB&I Technology (Nigeria) Limited (Full Time) D/Line, Port Harcourt**

- Business and Software Development. Analysis, Design and Implementation of Enterprise Business Solutions. This includes:
- Design of Project Monitoring in Rivers State Software Solution.
- Design and implementation of Human Biometric Data Acquisition Software

**Oct 2006- Oct 2007: *FutureShock Consultants (Full time), Lagos Island, Lagos***

- Software Developer. Worked Extensively with C#, SAP Business One, MS SQL Server and .NET platform for maintenance of Glo fone pals mobile social network web application and development of SAPB1 Financial solution for First Trustees Nigeria Limited.

**May 2005 – November 2005: *Aptech World Wide Education (Work Placement), Victoria Island, Lagos***

- Industrial Training: Database Administrator in Charge of the Centre Administration and Examination System. Faculty of programming and database courses including Microsoft Access, MS SQL Server, C#, Java, C, Web design and a variety of others. Involved in corporate training of MS SQL Server.

**Feb 2003- Apr 2003: *Resourcery Limited, Victoria (Work Placement) Island, Lagos***

- Internship: Networks and Telephony Department. Involved in Installation, Maintenance and Troubleshooting of Cisco Network Infrastructure, Telephone PBX Networks of types Avaya, Ericsson, Panasonic.

**Academic Papers**

- **Speech Recognition- An Object Oriented Approach(2016)** An unpublished academic paper
- **LSTM Language Model for the Wakirike Language** – An unpublished academic paper awaiting acceptance for 2018 Interspeech Conference.

**Projects Executed**

- Development of C++/Python/Perl/Bash based Automatic Speech Recognition engine using Kaldi and Sphinx4 systems. Research Project Carried out at the University of Huddersfield.
- Songs Database Mobile Web application for Redeemed Christian Church of God, Huddersfield. C#, ASP.NET core web api + Entity framework+PHP MVC Framework Web Application.
- Framework for Developing Mobile & Web Applications using Agile Techniques and KnockoutJS. Including a Literature Database and Web Forms Generation Engine.
- Development of a C++ 2/3D Laser profile software toolset. Computer based laser analysis and diagnosis tool [Master's degree Project]
- Development of a mobile phone virtual multimeter instrument using embedded C and Android Java.
- Business Application. Implemented at Bitsom Eye Clinic, Rumuibekwe, Port Harcourt.
- Reengineering of a Computer Based Testing Application to a Java Web-Based Distributed solution deployed at the 2011 nationwide Petroleum Development Trust Fund Scholarship Aptitude Test.
- Implementation of a Short Message Service (SMS) server to activate Software products.
- Developer in the creation of Enterprise Investor Financial software for First Trustees Nigeria Limited. Financial Software was based on Dot NET platform and integrated SAP Business One
- University CGPA Calculator for J2ME Mobile Phones. (A personal Project)
- Personal Expenses Manager for Nokia Series 60 Mobile phones. A personal project based on Python for Nokia Series 60 Platform.
- University Admissions Database System. Application Developed and used for the Rivers State University of Science and Technology Port Harcourt Admissions Office.

	<ul style="list-style-type: none"> <li>• Java based traffic light simulator. Being an Industrial training project seminar presentation.</li> </ul>	
Professional memberships:	<ul style="list-style-type: none"> <li>• Member, Mikrotik Network Professionals</li> <li>• Member, Institute of Engineering and Technology (IET)</li> <li>• Member, Association of Computing Machinery(ACM) + ACM Special Interest Group for Computer Graphics (ACM-SIGGRAPH).</li> </ul>	
Human Skills	<ul style="list-style-type: none"> <li>• Intuitive Human skills, team building, project management</li> <li>• Excellent Customer Relations and user-centric solution development</li> </ul>	
Conferences Attended:	<ul style="list-style-type: none"> <li>• 2019 UK Speech Conference, University of Birmingham</li> <li>• Annual Researchers' Conference (CEARC'13) of University of Huddersfield School of Computing and Engineering, Huddersfield, United Kingdom (December,2013)</li> <li>• 2011 Elearning Africa International Conference on E-Learning held in Dares Salam, Tanzania.</li> </ul>	
Hobbies	Swimming, mechatronics, computer graphics and music.	
References	Dr. David Wilson Senior Lecturer, Department of Informatics, School of Computing and Engineering University of Huddersfield United Kingdom d.r.wilson@hud.ac.uk [+44 1484 47 3118]	Dr. Keith Mccabbe Deputy Manager, Planning and Information Services University of Huddersfield. HD1 3DH United Kingdom K.McCabe3@hud.ac.uk [+44 1484 47 2069]

## Technology Proficiency

TECHNOLOGY	EXPERIENCE	LEVEL
Flutter	6+ months	Intermediate
Rust	3+ months	Beginner
Python ML stack (Numpy, pandas, sci-kit learn)	2+ years	Advanced
DeepLearning Libraries (TensorFlow, CNTK, Keras, PyTorch)	1+ years	Advanced
Kaldi Speech Engine	1+ years	Intermediate
Microsoft Productivity Tools	10+ years	Advanced
.Net platform (C#, VB)	10+ years	Advanced
ASP.NET MVC/Web API	3+ years	Advanced
Java (J2SE)	10+ years	Advanced
Java (J2ME)	5+ years	Advanced
MS SQL	10+ years	Advanced
Matlab	3+ years	Advanced
Labview	2+ years	Advanced
Python	7+ years	Advanced
Linux Bash	3+ Years	Advanced
C++	7+ years	Advanced
C	10+ years	Advanced
KnockoutJS/AngularJS/VueJS	2+ years	Advanced
Javascript/JQuery/XML/JSON	5+ years	Advanced
HTML/5	10+ years	Advanced
PHP	5+ years	Advanced
MSAccess	10+ years	Advanced
Android Java	4+ years	Advanced
Agile/TDD	2+ years	Advanced
MySQL	5+ years	Advanced
SAPB1	2+ years	Advanced
Microsoft Project	7+ Years	Advanced
PHP Code igniter	1+ Years	Advanced
PHP Laravel	1+ years	Intermediate
Java (J2EE)	5+ years	Intermediate
Oracle	5+ years	Intermediate
Ruby	1+ years	Intermediate
Scala	<1 year	Intermediate
R	<1 year	Intermediate
Perl/6	1 Year	Intermediate
Active Directory	3+ years	Intermediate
Linux/Unix	5+ years	Intermediate
Docker+Vagrant	2+ years	Intermediate
AWS/Azure	2+ Years	Intermediate
Cisco/Asterix/Microtik networks	3 years	Intermediate
Swift	1 year	Intermediate
MEAN Stack	1 year	Intermediate
CNC	2+ years	Intermediate
F#.NET	5+ years	Intermediate
Git/Subversion	1+ Years	Intermediate
Spark	2+ years	Intermediate

Rails	1+ years	Beginner
Kivy	1 year	Beginner
Photoshop	<1 year	Beginner
Unity	1 year	Beginner
WebGL	1 year	Beginner