Michael O. Matthews

RESEARCHER | SOFTWARE ENGINEER

CONTACT

☎ +44 746 943 2999

✉ oludamilarem@gmail.com

🖥 https://www.researchgate.net/profile/Oludamilare_Matthews

in https://www.linkedin.com/in/damilare/

SKILLS

→ **Programming Languages**: ABAP, Java, C++, Php-MySql, C, passing knowledge of C#

→ **Web technologies**: Flask, JavaScript, JQuery, HTML5, CSS, Bootstrap

→ **Data Science**: Data analysis using Python, use of descriptive and inferential statistics, application of machine learning algorithms

→ **Research**: Technical writing, research methodology and experimental design, hypothesis testing, feasibility studies

→ **HCI**: Usability, UX testing using physiological sensors and Eye tracking

→ **Consulting**: Requirement gathering, design of technical specification for implementation & testing, organization change management, risk management, system migration, business process (re)engineering

→ **ERP**: SAP platform, HR, business workflow, data migration, configuration & customization, reports, forms, process Integration, payroll , procurement

PERSONAL STATEMENT

A PhD candidate with interest in Human-Computer Interaction, specifically affective computing. During the past 3 years, I researched on the use of pupillary response as a proxy to sense arousal, while also using eye-tracking technology to identify the user's focal attention during moments of increased arousal. Future research interests include the use of unobtrusive technologies for affect detection in naturalistic settings. Previously, I worked as a software consultant delivering Enterprise Resource Planning (ERP) solutions using SAP platform.

EDUCATION

PhD Computer Science (Ongoing)   *2015-2019*
University of Manchester

MSc. Software Engineering (Distinction)   *2012-2013*
University of Manchester

B. Eng., ICT (2:1)   *2004-2009*
Covenant University, Nigeria

ONGOING PROJECTS (% completion)

Sensing arousal and focal attention using pupil dilations and eye-tracking (80%)
Under the supervision of Simon Harper and Markel Vigo, we have developed this approach using a data driven, iterative methodology. Evaluations were carried out on cognitive, emotional and interactive web stimuli. Results show promise and potential for use with web cameras in the future. Application areas include, UX, adaptive systems, tutoring systems, affective gaming and sensing user stress for mission critical applications.

Systematic Review Software (50%)
I am involved in the design and development of a systematic review software at the IAM lab, University of Manchester.

Inferring the Mood of a Community from Their Walking Speed (40%)
Moods are contagious and affect the productivity and wellbeing of a community. Gait characteristics have long being established as an indicator of a mood. On a communal scale, we explored the use of walking speed, using Microsoft Kinect V2 to measure the walking speed along a communal pathway. Along with contextual information such as sentiment analysis of tweets within the community, weather information, community events and self-reported emotions as ground truth, we are building a multi-modal approach to sense the mood of a community. I was the lead investigator in in a 2-month's pilot study at the University of Melbourne under the supervision of Jorge Concalves.

Moodbook (10%)
As a principal investigator on this project, I am interested in the behavioural and temporal characteristics of social media usage and its effects on the user's mood and psychological wellbeing.

FoodMood (5%)
As a principal investigator on this project, I am interested in understanding the impact of food, specifically the glycemic index of the food consumed, as it affects the motivation and activation levels of people in their workplace.

P U B L I C A T I O N S

Towards Arousal Sensing With High Fidelity Detection Of Visual Context
O. Matthews et al., Measuring Behaviour, Manchester, UK (2018).

Sensing arousal and Focal Attention During Visual Interaction
O. Matthews et al, ICMI, Colorado, US (2018).

Inferring the Mood of a Community From Their Walking Speed: A Preliminary Study
O. Matthews, et. al., Ubicomp Conference, Singapore (2018).

Moodbook: An Application for Continuous Monitoring of Social Media Usage and Mood
H. Zhang et. al., Ubicomp Conference, Singapore (2018).

W O R K   E X P E R I E N C E

SAP ABAP Consultant   *2014-2015 (1year, 6*
NLNG, Nigeria   *months)*

As a consultant for NLNG, I was part of the team that re-implemented their HCM and portal system and provided post-implementation support.
I developed their pay slip using smart forms and payroll data sources, enhanced the travel management to link with budgeting using user exits and BAPIs, built custom reports (for payroll, rewards and travel management modules), built workflow systems for leave requests, e-recruiting platform, and synchronized the remote e-recruitment server with the local R3 server using Electronic Document Interchange (EDI). Furthermore, I customized the SAP portal system (ESS/MSS) to provide additional information, show/hide contents based on the user's role in the organization structure.
I was given a cash award by the management for my overall impact on the project.

SAP ABAP Consultant   *2011-2012 (1 year)*
Kabo Solutions, Nigeria

As part of a 2-man ABAP team, we contributed to the implementation of SAP HCM solution at FIRS (Nigeria's equivalent of UK's HRMS) and provided post-implementation supported to the SAP HCM solutions at FIRS and NLNG.
I was involved in developing FIRS' custom payroll program using ABAP, migrating data from the legacy system using the Legacy System Migration Workbench (LSMW) and Batch Data Communication (BDC), creating custom reports for identifying differences between the legacy system and the new system during payroll parallel run, creating custom infotypes for master data entries, creating an interface to third-party bank APIs after payroll run.

SAP Solutions consultant   *2011(6 months)*
C2G Consulting, Nigeria

I was a techno-functional (HR-ABAP) consultant to several clients including the Society for Family Health (SFH), First Security Discount House (FSDH), UAC Nigeria, and Nest Oil. My roles included requirement gathering, providing on-site technical support and facilitating knowledge transfer in both HR and ABAP related domains.

Trainee ABAP/BW consultant   *2010-2011(6 months)*
Elogica solutions, Bangalore, India

As an intern, I learnt SAP ABAP, SAP BW 3.5, BI 7.0 and HR modules using live scenarios.

Software developer
Chamswitch Plc.   *2010-2011 (1 year)*
Circumtechnologies Ltd.   *2007 (6 months)*

Responsible for website design and e-payment integration.