## **Danford Paul Nchembi**

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## **Profile**

Effective and highly skilled software developer, offering expertise in developing solutions to the most challenging problems. Committed to meeting project milestones in a timely fashion. Desires an opportunity to develop large scale web applications together with designing and implementing workflows that will require data exchange between various application domains and processes.

Mobile No: +255 714 299 694

## **Technical Skills:**

## **Programming Languages**

- ✓ JAVA
- ✓ C#
- ASP .NET Core
- .NET Framework
- WCF
- ✔ Python
- ✔ Flutter(Dart SDK)
- ✓ Machine Learning with TensorFlow
- ✓ 19

## **Interoperability Standards**

✓ FHIR, HL7

#### **Frameworks**

✓ Django, Flask, Spring MVC, Visual Studio, Angular2

#### **Web Servers**

✓ Apache, Nginx, uWSGI, IIS

## **Cloud Technologies**

✓ Linode, Microsoft Azure

## **Experience:**

#### SoftMed

**Project Name: Tanzania HIM** 

Client: USAID

November 2020 - PRESENT

Worked with Hamilton Health Sciences(Canada), Nelson Mandela Institute of Science and Technology (Tanzania) and other team members in SoftMed to build the Tanzania Interoperability layer(Tanzania HIM) which will be used nationwide as a tool to integrate all health systems that the Ministry of Health is managing.

#### **Achievements**

- ✓ Worked on building mediators which are separate micro services that operate as an extension of the Tanzania HIM Core in executing use cases that the core cannot handle out of the box.
- ✓ Enhanced code quality by utilizing tools such as GitHub, Coveralls and Codacy to ensure that all submitted codes are up to the agreed standards before being merged with the main branch
- ✓ Participated in capacity building by training the Ministry of Health technical team throughout various workshops conducted during the course of the project.
- ✓ Participated in integrating source and destination systems through the Tanzania HIM by either using the configurations available or mediators built for that specific use case.
- ✓ Built the File Sync Service that is linked with the sFTP service in sending files to the configured mediators.
- ✓ Built the HDR web service that communicates with other services such as mediators to synchronise information and show it on the dashboard as charts and reports
- ✓ Documented all the processes and changes made as we attempted to integrate various systems through the Tanzania HIM.

#### **ADOSA**

**Project Name: Family Planning Application** 

Client: Pathfinder

February 2020 - August 2020

Collaborated with other developers in building a Family Planning Application (Mobile and Web). The mobile app was designed to assist Community Health Workers in offering the best Family Planning services by guiding them in their sessions with a series of questions to ask from the mobile app and finally issuing the right family planning method.

#### **Achievements**

- ✓ Participated in requirement gathering and design.
- ✓ Built the dashboard used to view the training progress of the CHWs and the Family Planning services being issued in the field.
- $\checkmark$  Participated in training and capacity building at both Pathfinder offices and in the field.
- ✓ Created Automated Test plans for all built features to improve the code quality
- ✓ Participated in deployment of the apps for over three regions in Tanzania
- Bug fixing while following on all the agreed processes to keep the code base clean and concise.

#### **SoftMed**

#### **Project Name: Health Commodity Tracer Application**

Client: Deloitte & USAID June 2018 - PRESENT

Worked with other team members to build the Health commodity tracer application.

These applications (mobile and web) were built to address the issue with delays in posting of the remaining stock balances for Tracer commodities in facilities all over the country.

These delays impacted the facilities a lot as there was always a risk of running out of very sensitive medication which should never be the case

#### **Achievements**

- ✓ Enhanced code quality by employing tools such as codacy and coveralls, continuously throughout the development process while troubleshooting any discovered issues.
- ✓ Ensured that bug reports were remedied and all issues were handled in a timely manner.
- ✓ Carefully documented technical workflows in a private wiki for education of newly employed staff.
- ✓ Wrote clean, clear and well-tested code for the Health commodity tracer application.
- ✓ Collaborated with other developers to identify and alleviate the number of bugs in the software.
- ✓ Built a web application with a dashboard to monitor and improve decision making for stakeholders on all issues concerning medication stock levels in all Health facilities in Tanzania
  - ♦ https://github.com/SoftmedTanzania/HEALTH-COMMODITY-TRACER.git
- ✓ Built a web application and some features on the mobile app for the HIV prevention and monitoring for Child and Mother Program.
- ✓ Created Automated Test plans for all built features so as to test all aspects of the application

## **SoftMed**

#### **Project Name: Community Based Health Care**

Client: USAID

April 2018 - June 2018

Worked with the team to build the Community Health Care applications using OpenSRP for android development and OpenMRS for the back end server.

I focused on the dashboard to build reports and analytics from the data collected in the field from the OpenSRP web service.(REST API).

#### Achievements:

- ✓ Built a reporting tool for the HTMR project to address all reporting needs for all facilities in Tanzania.
  - https://github.com/SoftmedTanzania/htmr\_backend.git
- ✓ We managed to develop and test all workflows in the mobile application
- ✓ We managed to roll out the application in over 3 regions in Tanzania
- ✓ We managed to train all relevant personnel on their involvements and responsibilities in various workflows in the applications so they can be productive.

# Senior System Developer – NPK Technologies/ Africa eHealth Solutions (AeHS) / PHILLIPS

August 2014 - March 2018 Tanzania, The Netherlands

Led the team that built AfyaPro, a Hospital Management Information System(HMIS), which is currently used in multiple hospitals in Tanzania ranging from small dispensaries to Regional and Referral Hospitals.

Over the last few years, we have managed to take AfyaPro from a desktop application(Client/Server) to a Web Application fully packed with a well detailed Electronic Medical Record(EMR), Coding standards (ICD, HL7, COIDC among others), Intelligence to predict patterns in the patient-professional interactions using Med Rules and Med facts, Remote Disease Care Management and many others.

Afyapro has proved to be very effective in promoting a smooth running of all hospital activities by offering the facilities clear channels to handle out-patient, in-patient, theatre, radiology, laboratory, maternal and child care, pharmacy and inventory departments.

I was exposed to various processes used in the Netherlands to aid in our development such as a full implementation of SCRUM (Agile development), Proactive Planning, Managerial Skills, Best Practises in Requirement Gathering, Analysis, Development and Implementation.

#### **Achievements:**

- Worked with PHILLIPS, a Dutch based company in implementing a Diabetes Call Centre Solution in Ghana which carried elements of Telemedicine, Machine Learning, Work Flows and Archetypes.
- ✓ Led a team of eleven (11) junior programmers throughout the development processes by taking care of the SCRUM process as a Scrum Master and as the lead developer so as to boost productivity throughout the development cycle.
- Reengineered multiple features that fuelled improvements to productivity, efficiency, uptime and accuracy for health facilities data.
- ✓ Designed and developed new features based on requirements that were shared by the system analysts.
- Created test plans/cases to cover all test scenarios for features built for a guarantee of quality in the application
- Developed and implemented new procedures for requirements gathering, needs analysis, testing, scripting and software documentation to strengthen quality and functionality of various Health Facility processes.
- Served as a core group member in defining and prioritizing technology investments for the next two years, ensuring the alignment of process, technology and business objectives.

#### **MISCELLANEOUS PROJECTS**

#### **INSURANCE ASSISTANT:**

#### August 2020 - PRESENT

Designed and implemented an insurance app, that was used to keep track of Health Insurance details for a client and connect them to their Insurance providers from the private sector by

- ✓ Implementing machine learning, to assist the clients pick a plan that was best suited for their needs such as age and health conditions (Vitals entered, Age and Ethnicity)
- ✓ Keep track of all policies a client has purchased
- ✓ Purchase Insurance policies from Insurance providers
- ✓ Offer a dashboard for Insurance providers to reach their clients with promotional material and instant messaging.

## **Education:**

## University of Dar es salaam, Dar es salaam

October 2010 - July 2014
Bachelor of Science in Computer Engineering and Information Technology

## Mzumbe Boys High School, Morogoro

April 2008 - February 2010 Advanced Level Education

### St. Anthony's Secondary School, Dar es salaam

January 2014 - October 2017 Ordinary Level Education

### Lukenya Academy Primary School, Nairobi

January 1997 - October 2003 Primary School education