Masoud Mmanga Hamad, MSc

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SKILLS PROFILE

☐ Data Science,Big Data, Machine Learning, Deep Learning, Data Mining, Datawarehouse

☐ Information Systems Project Management (planning, managing and policy)

☐ Information Systems Analysis and Design

☐ Database programming and administration (Oracle, Ms SQL Server, MySQL, PostgreSQL, Ms Access, NoSQL-Mongo DB)

☐ Web programming (JSP Maven, Hibernate and Spring ,PHP, Angular JS, JQuery, Ajax, Web Services, Node JS,Django, Flask, Native Script, Type Script) and web design (both static and CMS mostly using Joomla CMS)

☐ GIS Web Development (Python, Django and Geonode, Geoserver)

☐ Mobile Application Development (Android,HTML5 and Hybrid,NativeScript)

☐ Google Cloud Messaging

☐ Cloud Computing and IoT

☐ Office automation

☐ User training and training management

EDUCATION PROFILE

1. Vellore Institute of Technology,India

Date of Completion: 2019

MSc In Computer Application

Research Topic: Climate Big Data Analysis and Deep Learning

2. **The State University of Zanzibar, Tanzania**

Date of completion: 2009

Award: BSc Computer Science, Upper Second with Honors.

Project Title: Web Based Payroll System

3. **Fidel Castro Secondary School, Tanzania**

Date of Completion: 2006

Award: Advanced Certificate of Secondary Education

4. **Pemba Muslim Academy, Tanzania**

Date of Completion: 2003

Award: Certificate of Secondary Education

CONSULTANCY SERVICES

GENERIC SOFTWARE DEVELOPMENT (R&D PROJECTS)

- **Online University Portal(SkyChuo),**
  This is a research and development project under HM&Y Technologies. It is a generic product which is available as commercially off the shelf product for universities and colleges. It comprises the University Admission, Student Academic Register, University Time Table, Attendance, Course Evaluation, Hostel Management etc.
  Clients: Muslim University of Morogoro, IPA-Zanzibar, ZLRC etc.
  Role: Software architect and developer
  Nature of the task: Lead the research on best practices, technology choice decision, oversee user requirements specifications, development, implementation and user

training, and report preparations.

Technology: PHP7, MySQL, REST API Webservices, Node JS, Analytics Reports.

- **Online University Time Table,**

  This is a research and development project under HM&Y Technologies. It is a generic product which is available as commercially off the shelf product for universities and colleges. The software module is part of the larger software community codenamed "University Portal" which in addition to teaching and exam time tabling will also include students academic register, student finances, course evaluation system, and event manager for university.

  Client profile: The State University of Zanzibar (used for 2014/15 and 2015/16 time table preparations)

  Role: Software architect and developer

  Nature of the task: Lead the research on best practices, technology choice decision, oversee user requirements specifications, development, implementation and user training, and report preparations.

  Technology: Java Server Pages (JSP) and MySQL.

- **College Management System,**

  This is a research and development project under HM&Y Technologies. It is a generic product which is available as commercially off the shelf product for colleges (NTA Level 4 to 6). It is a comprehensive software package with modules ranging from academic registrations to finance.

  Client profile: Zanzibar Institute of Public Administration is on the process of procurement.

  Role: Software architect and developer

  Nature of the task: Lead the research on best practices, technology choice decision, oversee user requirements specifications, development, implementation and user

training, and report preparations.

Technology: PHP7 and MySQL.

- **Human Resource Management and Payroll System,**

  This is a research and development project under HM&Y Technologies. It is a generic product which is available as commercially off the shelf product.

  Clients profile: The State University of Zanzibar (2012), Zanzibar Institute of Tourism Development (2013)

  Role: Developer

  Nature of the task: Development, implementation and user training, and report preparations.

  Technology: C# and Ms SQL. I am currently leading the team to develop a web based solution using ASP.Net and Ms SQL Server

  CUSTOM SOFTWARE DEVELOPMENT PROJECTS

- **Project Management for Development and Installation of a Computer Based Online System for Zanzibar Register of People with Disabilities - JUMUISHI dBASE**

  Client: Department of Disability Affairs Second Vice President's Office

  Role: Software Developer

  Nature of the task: User requirements specifications, development, implementation and user training, and report preparations.

  Technology: PHP, REST Webservices, MySQL, Node JS, Analyticals Tools

- **Project Management for Development and Installation of a Computer Based Online System for Registration of Business Entities and Secured Transactions on Movable Properties,** ongoing

  Client: Business and Properties Registration Authority (BPRA)

Role: Part of the Government Technical Team taking the role of Secretariat and Consultant

Nature of the task: Feasibility study, member of negotiation team, and to ensure the Contractor (an international Company) meets quality requirements for the project.

Technology: ASP.Net and Ms SQL.

- **Project Management for Development and Installation of a Computer Based Online System for Zanzibar Land Information System (ZALIS)**

  Client: SMOLE-NIRAS Company from Finland

  Role: Main Consultant

  Nature of the task: Testing, Training, User Manuals, Feasibility Study, Requirement Validation, Reporting Technology: Grovy, JSP and PostgresSQL. QGIS

- **Code for Resilience-ZanSEA Developer for working with ZanSEA Geonode Server**

  Client: The State University of Zanzibar and ZanSEA Project supported by World Bank

  Role: Developer

  Nature of the task: Installation, Training, User Manuals, Customization and Reporting Technology: Python, HTML5, Jquery, Django

- **Project Management for Development and Installation of Ship Registration System and Ancillary Services,** ongoing

  Client: Zanzibar Maritime Authority

  Role: Assistant Consultant representing HM&Y Technologies which has tasked to take the role of project Consultant

  Nature of the task: Feasibility study, requirement validation, and to ensure the Contractor (an international Company) meets quality requirements for the project.

  Technology: Ruby on Rail and PostgreSQL.

- **Design and Development of Waqf and Trust Properties Management System,** December 2015 – June 2016

Client: Waqf and Trust Commission, Zanzibar

Role: Developer

Nature of the task: User requirements specifications, development, implementation and user training, and report preparations.

Technology: ASP.Net and Ms SQL.

- **Design, development and Implementation of Most Venerable Children (MVC),** October 2015 – April 2016

  Client: Ministry of Social Welfare

  Role: Assistant Consultant and Developer.

  Nature of the task: Review existing work routines, policy and develop the required software solution.

  Technologies: DHIS 2 Web Tool Framework

- **Design, development and Implementation of Health Care Engineering System and Transport System** 2012 - 2013

  Client: Ministry of Health and Social Welfare, Zanzibar under DANIDA

  Role: Consultant and Developer

  Nature of Task: Revision of the existing paper based data collection tools, training the new tools, implementing a computer system to capture, process, and analyse the collected data, developing indicator system, software user training and support, developing policy documents related to the health information system and Transport System based on Ministry

  Technologies used: PHP, MySQL, Ms Access, Ms Excel

- **Design, development and Implementation of Zanzibar High Education Loan Board System** 2011 - 2012

  Client: Zanzibar High Education Loans Board

  Role: Consultant and Developer

  Nature of Task: Revision of the existing paper based data collection tools, training

the new tools, implementing a computer system to capture, process, and analyse the collected data, developing software system, software user training and support, developing policy documents related to the Loan information system.

Technologies used: PHP, MySQL, PDF

RESEARCH PROJECTS

- Analysing Political Party Influence Using Data Mining-Case Study of India
- Perception of Social Issues through Social Media Analysis Using Big Data and Deep Learning
- Text Mining using Sentiments Analysis
- A Hyper-Heuristic Scheduling Algorithm for Cloud

OTHER NON-SOFTWARE IT PROJECTS

- **Development of SUZA Geospatial Strategic Plan,** January- May 2016.

   Role: Member

   Nature of the task: to conduct research and develop strategic plan for geographical information systems (GIS) and allied technologies that will be used to guide university teaching, research, and consultancy for the five year period of 2016/17 to 20121/2022

- **Design and Development of comprehensive multilingual web portal**

   Client profile: Zanzibar Government, Zanzibar, [Formerly] Ministry of Justice and Constitutional Affairs, Zanzibar Commission for Tourism (www.zanzibartourism.go.tz) 6 languages, Zanzibar Electricity Corporation – ZECO (www.zeco.co.tz), Zanzibar Public Leaders Ethics Commission (www.ethicscommission.go.tz).

   Role: Consultant and web designer

EMPLOYMENT HISTORY

Tutorial Assistant (Computer Science)
The State University of Zanzibar

May 2012 – to date

- Course lecturing (Programming Languages-C++, Java, Python, Software Engineering, Database Systems, Web Technologies, Mobile Application Development, and Computational Thinking.
- IT applications course tutoring (short courses at Institute of Continuing Education).
- Student supervision and academic counselling.

IT Officer
Ministry of State, President's Office, Constitutional Affairs and Good Governance, Zanzibar.

2010 - 2012

- Prepare and execute guidelines of IT development and use for the Ministry
- IT infrastructural support
- User support for office automation
- Local Consultant on Civil Registration and Vital Statics System

MANAGEMENT PROFILE
Assistant Project Coordinator,
Department of Computer Science and Information Technology
The State University of Zanzibar (SUZA)

Duration: 2013 – 2017

Responsibilities

- Oversee day-to-day activities of the Student Projects
- Managing staff and student issues at the department for Final Year Project
- Organise project write-ups, Project design and review

Member of ZanSEA (Zanzibar Social Environmental Atlas

for Coastal and Marine Areas) Project,
The State University of Zanzibar (SUZA)
Duration: 2015 – to Date

Other management positions
- Director and Chief Software Developer, HM&Y Technologies

Online Classess
- Machine Learning: Andrew Ng- Coursera
- Deep Learning: Deeplearning.AI, Andrew Ng-Coursera
- Machine Learning: IBM
  etc

TRAINING PROFILE
- REST API Using Python Flask
- DevOps-Ansible
- Amazon Web Services(AWS)
- Mobile Application Developer and Cloud System Specialist-5 Days each By IBM Africa Academy
- QGIS, Open Street Map and Remote Sensing-5 Days Training
- ZANSEA Geo-Informatics-Mainly Focus on Geonode and Django Framework-5 Days Training
- Open Street Map and Leaflet JS Training-5 Days

ENTREPRENEURSHIP AND BUSINESS PROFILE
- **Co-founded e-Data Solutions and Consultant Systems,** 2011
  Nature of business: IT related business, both software development and infrastructure design and support.
  Role: Chief Executive Officer

Company status: the company is active and growing.

- **Co-founded HM&Y Technologies,** 2013
  Nature of business: The core business of the company is to offer software solutions, either by developing or supporting the customers. Our business model is that of training-practice-production. We use recent graduates to offer them internship opportunities where the students get exposure of the real software development environment and hence improving the technical skills, and in return the company gets working software for sales.
  Role: Director and Chief Software Architect
  Company status: the company is at start-up level, and is making good progress.

REFEREES

☐ Prof. Idris A Rai

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The State University of Zanzibar

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