

!!As of Jan 2020;

```
[ "id": {  
  "Warren Kalolo",  
  "Computer Scientist | Software Developer",  
  "Goba, Dar es salaam, Tanzania",  
  [+255757654822, +255746355618],  
  ["warrenkalolo@gmail.com", "email@sentinelwarren.tech"],  
},  
  
"websites": {  
  "personal website": "sentinelwarren.tech",  
  "github": "SentinelWarren",  
  "stackoverflow": "Arduino-Sentinel",  
  "askubuntu": "Arduino-Sentinel",  
  "linkedin": "Warren Alex",  
  "launchpad": "Warren Kalolo",  
  "jamiiforums": "arduino sentinel"  
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## SUMMARY:

Focused on driving initiatives that maximize the impact of the innovation & research division on the company, including transforming the way implementation of innovation, creativity & research defines the delivery of work. Defining a technology outlook that shapes the future of the company & community by incubating and accelerating selection of emerging technologies & business opportunities to their next phase of growth.

## SKILLS:

- Analytical & Innovative problem solver
- Software Development
- Design patterns, Data Structures & Algorithms
- Emerging Technologies i.e. AI & Machine Learning , Blockchain, Cloud Computing, IOT & Robotics
- Electronics / Embedded systems/ Microcontrollers
- UI/UX Design & Prototyping (With Design Thinking methodologies)
- IT Management
- Satellite Internet Installation & operation (Hughes systems )
- Solution Architecture
- Renewable Energy/Smart mini-grids operation (Victron, Schneider, Sparkmeters)
- GIS
- Economics i.e. Game theory
- Big Data
- Data science
- Drones operation (DJI, DYI made)
- 3D Modeling & Anime and Game Dev
- Cryptography
- Quantum Computing & Neuroscience scholar

## TOOLS:

Advanced Languages: [Python, Javascript | Typescript, C, Bash, Powershell, Perl, Scratch]

Intermediate Languages: [R, Rust, Ruby, C#, C++, Lua, Octave, Haskell, GraphQL, SQL, Coffeescript, Dart, Swift, Java, Basic Assembly(MOS6502)]

Frameworks & Libraries : [Vue.js, React.js, Ruby on Rails, Flask, Django, Web2py, Apache Hadoop, Scrapy, PyQt, Kivy, Flexx, Electron, Flutter, PyGame, Pandas, Numpy, Scikiti\_learn, Tensorflow, Opencv, ffmpeg]

JS runtimes: [V8, Nodejs, Deno, Spidermonkey]

VC & DBs: [Git, Mercurial, PostgreSQL, MySQL, MongoDB, HBase]

Web Servers & other IT/DevOps: [ Apache, Microsoft IIS, NGINX, AWS, Azure, AzureAD, Docker, Kubernetes, Linux, Windows server, VMware ESXI, Jenkins, Artifactory, Vagrant, Ansible, GLPI ]

UI/UX: [XD, Invision , Figma]

Other Tools: [Atlassian products{Jira, Confluence, Bitbucket}, Salesforce, SAP, QGIS, OpenGL, Unity3D, Blender, Gimp, Inkscape, Unreal Engine, Some Autodesk products[Maya, Mudbox, 3DS Max] , ROS, Arduino, Raspberry Pi, MSP430 LaunchPad, Sparkmeters]

## EXPERIENCE:

```
{  
  "Title": "Digital/IT Officer",  
  "Employee": "ENGIE Powercorner (ENGIE Africa BU)",  
  "Duration": "Oct 2017 – Present"  
}
```

### Responsibilities;

- Innovation
- Sysadmin [ Windows Server 2012 R2 & Azure AD , VMWARE ESXI ].
- IT infrastructure management | helpdesk & troubleshooting, working closely with ENGIE Africa IT and ENGIE IT on various projects i.e. building, config and maintaining ENGIE Powercorner infra, Skynote Deployment, ONE Network roll out across ENGIE Africa BU, GLPI deployment etc.
- Implementation of various digital tools i.e. [ SAP, Salesforce, O365, ...].
- Mobile Money integrations of various telecoms in Tanzania i.e. [ Mpesa, Tigo pesa, Halopesa, Tpesa etc].
- Satellite Operations i.e. Installation, oversee after installation network monitoring and troubleshooting with collaboration and support from providers.
- IOT Smart Meters [ Sparkmeters ] Digital platforms monitoring and management.

- SharePoint administration, Office 365 & Okta administration through ENGIE internal program.
- SAP deployment
- TRA's Electronic Signature Signing machine[ ESD ] deployment and monitoring.
- Solar-coin Wallet(Blockchain) Monitoring
- Safety & Security.

{  
**"Title": "IT Intern",**  
**"Employee": "ENGIE Powercorner (ENGIE Africa BU)",**  
**"Duration": "Jul 2017 – Sep 2017"**  
 }

Responsibilities;

- Maintained and improved ENGIE PowerCorner IT infrastructure in Dar es Salaam in relation with ENGIE global IT infrastructure in Paris.
- Supported the implementation of new Digital tools i.e. [SAP, Asana, ...].
- Supported the opening of ENGIE Powercorner Tanzania branches/clusters around Tanzania.
- Supported IT needs of Mini-grids across ENGIE Powercorner Tanzania clusters.
- GIS & Aerial imagery using drones [ DJI Phantom 4 Pro ]

{  
**"Title": "Electronics Technician | Programmer",**  
**"Employee": "Tembo Electronics",**  
**"Duration": "Nov 2015 – Jun 2017"**  
 }

Responsibilities;

- Maintained and repaired electronics & embedded systems for clients (Computers, Smart devices, Printers etc.)
- Developed custom software for clients according to the requirements.
- Administered Linux server instances on Cloud.
- Embedded Systems | IoT Devices Development

## PROJECTS:

*Proprietary;*

### ➤ *MUP(Micro Utility Platform)*

I was part of the team that developed/maintained an automated Micro Utility Platform that is integrated to CRM, Mobile Money payment gateways [Mpesa, Tigo pesa, Halopesa, Airtel Money, MTN] and a cloud metering system. The platform simplified customer orders creation (using third part CRM solution i.e. Salesforce) by

automatically parsing the payments made via MM to the metering system that the customer's order was created to in real time. Previously the tasks were done manually by the operators. It was also linked to Bulk SMS service for notification to the customers i.e. when made payment, and for their other various services usage and payments made. Also it helped to automatically switch the customer meters to 0(off) or 1(on) accordingly to customer balance, payments and usage status.

The platform we created had a huge impact on the site operations in general, especially to the Technical & Commercial teams where as it simplified most of the work and allowed us to fully concentrate in executing other interesting innovative projects, and matter of fact, it's now used across more than 8 sites with more than 1500 customers that the company is currently operating both in Tanzania and Zambia

➤ *AutoQuickAdmin [ENGIE Ensemble Support/PEO Project]*

Created internal ENGIE Powercorner automated tools to perform basic admin task i.e. O365 license assignment, Okta & Azure AD management, Mailboxes & Distribution List creation etc. It used ENGIE PEO web interface API protected through Okta auth.

On every API Call the API will create an object named request Container in the database. This object will contain all the parameters of AutoQuickAdmin request or (requests if sent more than one request in the requests parameter) and the name of the specific product called. The PEO Engine check the request Container's database collection to find new entries, if one is found it will process the request Container and create a request Item Object (in the database) for each request contained in the request Container. Then the PEO Engine execute each product and update the request Item status and result (Output parameters). Then AutoQuickAdmin deals with the Output parameters accordingly.

The tool simplified the IT team on performing bulk repetitive admin tasks, generated reports via user friendly dashboards for end of the month KPIS, improved the team workflow.

➤ Others to be shared upon request.

*Open-source;*

➤ [Blockchain Prototyping](#)

Experimenting around blockchain implementation using python [code base].

➤ [PowerShell-Config.py](#)

A simple python script to simplify and automate first time PowerShell configuration.

➤ [Homebrew-Cask](#)

Homebrew-Cask extends Homebrew and brings its elegance, simplicity, and speed to the installation and management of GUI macOS applications such as Atom and Google Chrome .

➤ [Reverse-Shell](#)

Reverse Attacker TCP Python Shell

➤ [Other](#)

## EDUCATION & ACCOMPLISHMENTS:

*Coursera Certifications;*

- [Python Data Structures](#)
- [Introduction to Game Development](#)
- [Introduction to Big Data \(2015\)](#)
- [Big Data, Cloud Computing, & CDN Emerging](#)
- [Smartphone Emerging Technologies](#)
- [Front-End Web UI Frameworks and Tools](#)
- [Introduction to Software Product Management](#)
- [Introduction to the Internet of Things and Embedded Systems](#)
- [Responsive Website Basics: Code with HTML, CSS, and JavaScript](#)
- [Ruby on Rails: An Introduction](#)
- [Rails with Active Record and Action Pack](#)
- [Ruby on Rails Web Services and Integration with MongoDB](#)

## REFEREES:

Available upon request!