

# Edwin Kareo

Senior Software Engineer

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[Github](#)

[Bitbucket](#)

[Gitlab](#)

## Personal statement

I am a highly focused software engineer with four years experience in a variety of development and engineering positions. Organised, methodical and a keen eye for detail results in solid coding, optimized and trustworthy software programmes. Understanding client requirements and communicating the progress of projects are core values in achieving long lasting business relationships.

## Core skills

- Broad development knowledge, including Linux, Apache, Nginx, SQL databases and No-SQL databases
- Industry aware and technically up to speed with current software development tools
- Strong analytical skills and level headed problem solver
- Strong database design
- Strong PHP object oriented programming using laravel MVC framework
- Strong Ussd and SMS application development
- Intermediate level Python OOP with flask framework
- Strong Angular 7 and ionic 4 frameworks for web and mobile app development respectively
- Amateur level ethereum smart contract development with solidity
- Intermediate level vue js framework for web app development
- Experienced in scheduled processing, queues and application caching in a Linux environment

- Experienced in Cloud server setup and configuration on [Digitalocean](#), [Amazon web services](#) (EC2 (Servers, Load balancer, Autoscaling), RDS, S3 bucket), [Docker](#)
- Experienced in virtual private network (VPN) setup and configuration i.e. [Strongswan](#)
- Experienced in voice over internet protocol (VOIP) setup using Web Real-Time Communication tools (webRTC), [Asterisk server](#) and SipML
- Experienced in payment gateway integrations: Safaricom Mpesa integration B2C, C2B, Stripe, Paypal and Flutterwave.
- Experienced in [Kobo ODK](#) API integration, Facebook messenger bot API integration, telegram bot API integration.
- Experienced in [Mifos](#) core banking system setup, configuration and API integration
- Experienced in [H5P](#) integration
- Experience in [Directus](#) headless content management system setup and integration

### Tools for development and optimization

- Programming: C++, Java, J2ME, Visual basic, PHP -Laravel, Javascript ES6, Angular 7, Python- Flask, Vue js
- Databases: MySQL, PostgreSQL, MongoDB, Firebase, Oracle, Microsoft Access
- Optimizations: Beanstalk fast work queue, Redis caching
- Mobile application development: Ionic 4 hybrid framework for android and ios applications
- REST API development: Laravel lumen, Laravel, Flask RESTful
- Machine learning: Natural language processing PHP NLP tools with Naive bayes classifier, Caffe machine learning framework
- Version control (Git): [Github](#), [Bitbucket](#), [Gitlab](#)
- Continuous integration and continuous deployment: [Gitlab ci/cd](#), Gitflow workflow, Laravel deployer
- Frontend web: Html5, Css3, JQuery, Bootstrap 4, Materialize, Highcharts, Angular 7
- Search engine optimization: Google webmaster tools, Bing
- CMS: Joomla, Wordpress, Moodle, Directus
- Web-RTC: [SIPML](#), [Asterisk server](#)
- Devops: [Prometheus](#), [Grafana](#), [ELK stack](#)

## Project management tools

- Trello / Jira for tracking, organizing and prioritizing project tasks.
- Slack for communication

## Education

**Daystar University** (2010 – 2015)- BSc in Applied Computer Science

## Trainings attended

- Knowledge for life program - [Seven seas technologies](#)
- SMS and USSD training - [M:Lab East Africa](#)
- Python Django, Python Flask, PHP Laravel, Angular 4, Agile: scrum - [Mobidev Kenya Limited](#)
- Merck accelerator programme
- Human centered design - [IDEO](#)

## Work history

Project	Description	Technologies
<a href="#">Totohealth</a>	Totohealth is an sms based platform that sends messages to parents to monitor the progress of their pregnancy and development of their child. It enables parents to receive messages based on their stage of pregnancy or child's age that highlights warning signs in pregnancy or child's health.	<ul style="list-style-type: none"><li>• Frontend: Html5, css3, bootstrap 3, jquery</li><li>• Backend: Ubuntu 16, laravel, virtual phone(africastalking), SMS, USSD, Mpesa instant payment notifications</li><li>• Server: Ubuntu 16, Apache 2, PHP,</li></ul>

	Organizations and counties register parents to start receiving its text messages on various subjects, including vaccination reminders, clinic appointments, nutrition and family planning advice, and others, as well as schedule and send reminders, appointments, surveys, and announcements to parents. It has over 30,000 registered parents.	Mysql, Beanstalkd, Memcached
<a href="#">Pesaupesi</a>	Pesaupesi is a USSD based salary advance solution for employers who want to offer their employees a salary advance service, but do not want to be held up with all the logistics involved. Once registered and approved, employees can access loans according to their standard by simply dialing a USSD code, requesting and getting money via Mpesa. It currently serves over 1,000 employees.	<ul style="list-style-type: none"> <li>• Frontend: Html5, css3, material css, bootstrap 4, jquery</li> <li>• Backend: Laravel framework, SMS, USSD, Mpesa instant payment notifications</li> <li>• Server: Ubuntu 16, Apache 2, PHP, Mysql, Memcached</li> </ul>
<a href="#">Keheala</a>	Keheala is a digital health platform that delivers behavioral interventions across basic feature phones	<ul style="list-style-type: none"> <li>• Frontend: Html5, css3, bootstrap 3, jquery, SIPML</li> </ul>

	<p>and smartphones in order to improve healthcare access and treatment outcomes for patients suffering from tuberculosis. Registered patients are able to receive daily reminders to verify their treatment via SMS and USSD. Guidance and counseling is provided to patients through calls and chat messages made from the system by support sponsors. It currently serves over 15,000 tuberculosis patients.</p>	<ul style="list-style-type: none"> <li>• Backend: Laravel framework, virtual phone, SIP phone, SMS, USSD, Mpesa instant payment notifications</li> <li>• Server: AWS EC2 Ubuntu 18, Apache 2, PHP, AWS RDS Mysql, Beanstalkd, Memcached, Load balancer, Fail 2 ban, Asterisk</li> </ul>
<a href="#">Asante finance group bloom finance</a>	<p>Asante bloom finance is a mobile based agent float financing solution for merchants. It serves over 40,000 merchants in Kenya.</p>	<ul style="list-style-type: none"> <li>• Frontend: Html5, css3, bootstrap 3, jquery</li> <li>• Backend: Laravel framework, virtual phone, SIP phone, SMS, USSD, Mpesa instant payment notifications, Mifos</li> <li>• Server: Ubuntu 18, PHP, Postgresql, Mysql, Redis, Tomcat, Mifos X</li> </ul>
<a href="#">Watucredit</a>	<p>Watu Credit Limited is a dynamic and fast growing non-bank finance company</p>	<ul style="list-style-type: none"> <li>• Frontend: Html5, css3, bootstrap 4, jquery</li> </ul>

	<p>that offers asset financing (motorcycles and three-wheelers) and group lending products (short-term and business loans) and currently is expanding with branches opened in Nairobi, Malindi, Nakuru and Mombasa (Town). Watu Credit prides itself in offering fully cash-less services for loan disbursement and collection as well as 24-hour access for clients to their account balances.</p>	<ul style="list-style-type: none"> <li>• Backend: php, laravel, SMS, USSD, Mpesa instant payment notifications, Mifos</li> <li>• Server: Ubuntu 18, Apache 2, PHP, Mysql, Tomcat, Mifos X</li> </ul>
<a href="#">EMX</a>	<p>EMX is a cloud based electronic medical exchange system software that allows for secure sharing of patient medical data, reports and studies between hospitals, physicians and pharmacies.</p>	<ul style="list-style-type: none"> <li>• Frontend: Html5, css3, bootstrap 3, jquery</li> <li>• Backend: Laravel framework, SMS, Flutterwave</li> <li>• Server: EC2 Ubuntu 18, PHP, RDS Mysql</li> </ul>
<a href="#">Billing</a> / <a href="#">Helapay</a>	<p>Billing is a payments platform integrated with safaricom mobile payment gateway Mpesa and banks.</p>	<p>Frontend: Html5, css3, Vuejs framework, Quasar</p> <p>Backend: Laravel framework, Mpesa G2, Tomcat Mifos X</p>

		Server: Ubuntu 16, Apache 2, php, mysql, strongswan vpn
<a href="#">Learning point/ Nawiripro</a>	Nawiripro is a Mobile Learning Management System Platform for Informal Sector Businesses where users are taught entrepreneurial skills on how to increase their daily income and link them to asset financing partners, and more informal sector job opportunities	<ul style="list-style-type: none"> <li>• Frontend: Html5, css3, bootstrap 4, jquery, H5P</li> <li>• Backend: php, laravel, SMS</li> <li>• Server: Ubuntu 20, PHP, Mysql, Directus, Prometheus, Grafana, ELK stack</li> </ul>
<a href="#">WUSC remedials platform</a>	This is a platform for monitoring remedial classes enrollment, class attendance, follow up data and student performance records in refugee camps.	<ul style="list-style-type: none"> <li>• Frontend: Html5, css3, bootstrap 4, jquery</li> <li>• Backend: Laravel framework, Kobo ODK</li> <li>• Server: Ubuntu 20, PHP, Mysql</li> </ul>