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Nairobi, Kenya

SKILLS

Service Oriented Architecture & Microservices

Web 3 Decentralised applications

Interactive TV & Smart TV

Web TV & IPTV

Cloud Computing(Saas, Paas, IPaas, CPaas & Ccaas)

OTT Web Apps (LG WebOS, Samsung Tizen)

JavaScript, NodeJs & ReactJS

VideoJs & Video Streaming

LINKS

Github:

<https://github.com/joelbarasa/>

LinkedIn:

<https://www.linkedin.com/in/jbarasa/>

EDUCATION

Bachelor of Science
Egerton University
2011

Computer Science

Joel Barasa

SENIOR SOFTWARE ENGINEER

ABOUT ME

As an accomplished software engineer and full-stack developer, my area of expertise lies in creating cutting-edge video streaming applications for web-based TV platforms. My role involves designing and developing technically advanced video streaming apps with multiple backend integrations that enhance content discovery, user onboarding, payments, and various user engagement features.

I have delivered numerous Web TV app solutions while focusing on developing intuitive Web UI UX interfaces with user-friendly features. With over a decade of experience in the field, I specialize in developing web applications using JavaScript, Mongo DB, ExpressJS, React, TypeScript, and NodeJS. My passion for web development drives me to create reliable and secure applications that meet the needs of my clients. I have perfected the art of writing clear and concise code that is easy to maintain.

WORK EXPERIENCE

Web TV Developer

Melita / Remote / May 2023 - Present

Melita is a Maltese telecommunications company that provides television, mobile, broadband Internet, and fixed-line telephony services.

My role entails developing and maintaining custom web applications and RESTful APIs using Mongo DB, ReactJS, Tailwind, Twitter bootstrap, Express and Node.js as outlined below:

- Implemented a responsive, mobile-first front-end utilizing React.js and tailwind resulting in a 20% increase in mobile traffic.
- Developed RESTful APIs using Node.js which improved application efficiency by 30%.
- Analysis of requirements and specifications of software users and TV manufacturers.
- Designing, testing, and debugging software programs and applications for smart TVs
- Coordinated with clients to gather requirements, provide consultations and deliver results to improve customer satisfaction by 90%.
- Improved existing applications with modern features and design to create more user-friendly and efficient tools, leading to a 75% reduction in customer complaints.

Technologies Used: Apache servicemix, Java, MongoDB, Mongoose, MySQL, Oracle PL/SQL, Redis, Python, JavaScript, Node JS, SOAP XML, RESTful APIs, Postman, SoapUI, Apache Jmeter, Amdocs CRM and OCS, HTML, HTML5, CSS, Twitter Bootstrap, Express.js, Jenkins, Docker, Kubernetes, Git & Jira

SAMPLE PROJECTS

Video Streaming application

Developed a live streaming Web TV application with chat functionality using React JS as the front-end framework and 100ms as the back-end service. The app allows users to broadcast or watch live video content and interact with other users through text messages. The app also supports different platforms, such as smart TVs, web browsers, and mobile devices

Telkom BI Solution

As part of engineering team, played integral part in architecture and development of a SaaS product that delivered analytics to Telefonica company. The product imposed multitenancy and integrated platforms such as MicroStrategy and IBM Netezza for data processing, SQL Server and ASP.Net MVC for web application services. The web front also incorporated robust visualizations provided by Bootstrap and Highcharts JavaScript libraries.

Roles:

- Engineered server modules interfacing ReST based services and MicroStrategy.
- Built batch workflow using Automate and Quartz.Net for processing big data hosted on Netezza and SQL Server.

Identity Management Solution

Developed and implemented a web-based Identity Management system for the Kenya Airports Authority integrated with access control system to manage and control access to all airports' premises. The solution is implemented in all airports in Kenya.

Senior Client Solutions Architect

Infobip / Nairobi / Nov 2021 - May 2023

Infobip is an omni-channel communications platform provider used for customer support and engagement with additional capabilities like customer profiling, targeted customer communication, geolocation, chatbots & AI.

This role involved working as a trusted advisor to our customers by providing technical guidance from requirements analysis to actual solution design addressing customers actual pain points as outlined :

- Championed creating and implementing 20 complex Solutions for 5k clients in public health & transport, energy & utilities, finance and telecommunications industries.
- Orchestrated migration of 8k end users from a legacy system to Infobip's enterprise platform within the first 4 months of my job.
- Collaborated with executive and project teams on strategic initiatives for 3k customers by conducting proof-of-concept demonstrations for new products.
- Created detailed technical requirement documents based on business needs of our clients; improved customer satisfaction by 60%.
- Partner with Professional Services personnel to ensure we co-architect the best solution for clients, at the highest speed, ensuring customer satisfaction.
- Remove technical inhibitors to the sales opportunities by having extensive knowledge of InfoBip's SAAS portfolio, including security considerations.

Technologies Used: Oracle PL/SQL, Python, Tamper Monkey, Redis, JavaScript, SOAP XML, Postman, SoapUI, Jenkins, Docker, Kubernetes, Git & Jira

Software Integrations Technical Lead

NCBA Group / Nairobi / Jun 2019 - Oct 2021

NCBA group digital business is a fintech providing Mobile Money Saving and Lending solutions to customers in East and West African Markets.

I led a team of back-end developers to deliver solutions for the digital business unit. Below are some of my key successes:

- Developed tailor-made enterprise architectural blueprints, with clear descriptions for various fintech usecases.
- Designed & developed integrations with VISA's Real-Time Data Exchange(RDX) API called 3D Secure integration. This is a payer authentication, which is a security protocol that helps to prevent fraud in online credit and debit card transactions.
- Planned, designed, and developed Agent Financing solution for MTN partnership in Ivory Coast, Rwanda and Uganda targeting MTN agents and merchants.
- Lead architectural design, development, and implementation of data integrations.

Technologies Used: Java, Python, Oracle SOA middleware, Fiorano, T24, Docker, MySQL, Oracle, PL/SQL, SQL Developer, Toad for Oracle, Postman API, SOAP UI, Apache Jmeter, Oracle SOA Fusion middleware, Node JS, Docker, Kubernetes

ACHIEVEMENTS

Spearheaded a \$14M Software project

from design to deployment as a senior software engineer in a 10-people team.

40% improvement in query performance

by redesigning and fully revising the two largest MySQL databases.

Systems Integrations developer

Jubilee Insurance / Nairobi / Dec 2018 - Jun 2019

Worked as a Backend Developer in Jubilee Medical Insurance domain as outlined below:

- Developed a notification delivery microservice with fan-out architecture.
- Worked on dashboard and API development for monitoring and managing Applications
- Analyzed chatbot systems, data usage, work processes, improved UI, and debugged micro services.
- Writing Junit/integration test cases to validate the code quality and code coverage.

Senior Software Engineer

Indra Systems / Nairobi / Oct 2012 - Oct 2018

Indra is a world-leader in providing proprietary solutions in Transport, Air Traffic, Energy & Utilities and Defence markets.

Focussed on designing and development of Messaging Applications for Smart Grid Systems as outlined below:

- Designed, developed, deployed and troubleshooting software solutions using technologies such as C/C++, Java, HTML5/CSS, Oracle PL/SQL and JavaScript.
- Documenting designs, development, testing approaches, knowledge and best practices.
- Software modelling and simulation, software code analysis, code metrics identification, system risk analysis and software reliability analysis.
- Worked on development of backend for Smart Grid applications for Utility companies in EMEA region.

Technologies Used: MySQL, Oracle, PL/SQL, C/C++, SQL Developer, Tamper monkey, JavaScript, Node JS, SOAP XML, Postman, Microsoft Dynamics, SAP and Apache ServiceMix