## DAVID OGALO

Nairobi, Kenya ♦ (+254) 759172608 ♦ ogalodavid10@gmail.com

#### **EDUCATION & CERTIFICATIONS**

Strathmore University

Bachelor of Science in Informatics & Computer Science

Nairobi, Kenya

ALX AiCE AI Career Essentials AWS Certified Cloud Practitioner Oracle Certified Associate, Java SE 11 Developer

### **SKILLS**

Languages JavaScript (React, Node.js), Java (SpringBoot), Python, HTML/CSS

Database Technologies MySQL, MS SQL Server, PostgreSQL, Oracle, Elasticsearch

Operating Systems Windows, Linux

Tools GitLab, Git, Docker, Kubernetes, CircleCI, Selenium, Cypress

Additional Skills SDLC, Scripting & Automation, Networking Fundamentals, Troubleshooting,

Monitoring & Performance Tuning, Documentation, Agile Methodologies

### PROFESSIONAL EXPERIENCE

# Software Developer

Full-Stack Developer

Jan 2019 - Current Nairobi, Kenya

- Full-Stack Development: Proficient in developing both client-side and server-side logic, specializing in building reusable code and libraries for future use. Leverage JavaScript frameworks, HTML5/CSS and Python to build web applications while implementing and managing third-party integrations and databases. Skilled in designing and developing Microservices and Web Services to ensure interoperability between systems. Additionally, experienced in mobile development using React Native framework to create cross-platform mobile applications with intuitive interfaces, resulting in increased user engagement. Extensive experience with CRM systems, including Salesforce and HubSpot, developing custom solutions to streamline sales processes and improve customer relationship management.
- Security Implementation: Dedication to securing systems by implementing access restrictions techniques (incl. OAuth, Role-Based Access Control, Access Tokens), Adequate controls techniques (incl. Input Validation to prevent SQL injection or Cross-Site Scripting (XSS), Output Encoding, Data Encryption, Error handling and logging), Regular Security Audits and Penetration Testing, resulting in a 40% decrease in security incidents.
- DevOps and Cloud Computing: Championed DevOps practices, establishing CI/CD pipelines, virtualization using VMware, containerization using Docker and orchestration using Kubernetes. Streamlined development workflows, reducing time-to-market by 25% and enhancing overall team collaboration and productivity.
- Quality Assurance and Testing: Solid understanding of software testing principles, including test planning, test case design, test execution, and defect management. Executed rigorous testing methodologies, including functional, security, performance, and usability testing, resulting in a 30% decrease in post-deployment issues. Implemented automated testing frameworks/tools such as Selenium, JMeter, and JUnit, improving test coverage by 40% and ensuring application reliability and performance consistency. Proficiency in testing RESTful and SOAP web services using tools like Postman and SoapUI as well as automating API tests for backend services.

## **Data Center Operator**

Kenya Revenue Authority (KRA)

Jan 2023 - Current Nairobi, Kenya

- Database Administration and Optimization: Administer databases, optimizing data retrieval speed and resource utilization through advanced database design and indexing techniques, resulting in a 25% improvement in data access efficiency. Implemented backup strategies and disaster recovery plans, ensuring data availability and minimizing downtime, leading to a 20% reduction in data recovery time.
- Data Organization and Mining: Efficiently collated and organized qualitative and quantitative data using Python libraries and SQL queries, enhancing data integrity and accessibility. Applied advanced data wrangling techniques to handle missing values and outliers, improving data quality and reliability by 30%.

- Data Security and Access Control Implementation: Implement robust data security measures and access controls within the data center infrastructure, I enforce stringent security policies leveraging technologies such as firewalls, intrusion detection systems (IDS), and encryption protocols. By integrating concepts such as least privilege access, role-based access control (RBAC), and multi-factor authentication (MFA), I ensure comprehensive protection of sensitive data, mitigated risks, and maintained compliance with regulatory requirements.
- Resource Monitoring and Utilization Optimization: Deploy advanced monitoring tools to track resource utilization and performance metrics, enabling proactive optimization strategies. Analyze data trends and employ techniques such as capacity planning and predictive analytics to identify optimization opportunities and implement strategies to enhance resource allocation, enhancing overall system efficiency by 25%.

## IT Support Technician

May 2022 - Aug 2022 Nairobi, Kenya

International Livestock Research Institute (ILRI)

- Collaborated closely with cross-functional support teams to effectively escalate and resolve complex technical issues, ensuring minimal disruption to end-user operations and maximizing overall client satisfaction.
- Implemented proactive measures to optimize IT infrastructure, resulting in a 20% increase in system performance and strengthened cybersecurity protocols. Utilized virtual assistance tools and innovative techniques to streamline processes and bolster system resilience.
- Actively participated in system upgrades and maintenance activities, gaining hands-on experience in configuring hardware, software installation, and troubleshooting network-related issues. Leveraged a range of diagnostic tools and methodologies to ensure seamless network operations.

## Software Developer Intern

Feb 2021 - May 2021 Nairobi, Kenya

Centric Limited

- Contributed to the migration of legacy systems to AWS, implementing data migration strategies and leveraging AWS Database Migration Service (DMS), showcasing expertise in cloud architecture and data management.
- Contributed to the customization and integration of ERP solutions in businesses, particularly ERPNext and SAP S/4HANA, collaborating with cross-functional teams to streamline business processes and optimize system performance, demonstrating proficiency in enterprise software development and integration.
- Played a vital role in the implementation of Continuous Integration/Continuous Deployment (CI/CD) pipelines and containerization techniques, utilizing tools such as Docker and Jenkins to automate software delivery and deployment processes, showcasing a commitment to DevOps practices and software life-cycle management.

### **PROJECTS**

Sentiment Analysis on Social Media Data. Conceptualized and developed a sentiment analysis model to quantify the positivity of tweets across diverse geographic regions. Leveraged advanced Natural Language Processing (NLP) techniques, including count vectorization, TF-IDF, and Doc2Vec, to extract meaningful insights from unstructured text data. Demonstrated expertise in Python programming, utilizing libraries such as NLTK and Gensim, alongside neural network architectures to train and fine-tune the sentiment analysis model.

ANPR Parking Management System. ANPR Parking Management System. Led the design and implementation of an Automatic Number Plate Recognition (ANPR) system, utilizing deep learning algorithms for accurate license plate identification. Employed TensorFlow for model training and optimization, leveraging supervised learning techniques with a dataset sourced from Kaggle. Utilized OpenCV for image preprocessing and feature extraction, enhancing model performance. Applied Optical Character Recognition (OCR) techniques and advanced image processing methodologies to extract license plate characters in real-time, ensuring precise and reliable identification. Additionally, implemented model evaluation and validation techniques to assess the performance of the system.

Dynamic Webapp for Techsage Ltd. Led the end-to-end development of a dynamic web application for Techsage Ltd. Utilized React to build the UI, then incrementally adopted Next.js features for routing, data fetching, and caching. Engineered robust backend architecture with Node.js and MySQL, optimizing performance and scalability.

M-Ticket - Online Ticketing System. Collaborated in the development of an online ticketing system. Utilized React.js and Node.js with MySQL for frontend and backend services, respectively. Integrated Flutterwave's payment gateway for secure payment processing. Tested and optimized system performance for reliability during peak usage.