**BENSON MACHARIA**

CISM, CISA, CISSP, CEH, AWS, GCP | bmacharia.com | linkedin.com/in/benson-macharia| github.com/bensonmacharia

**PROFESSIONAL SUMMARY**

I am a Cybersecurity, Technology Risk, and IT Audit professional with over six years of experience in the financial services industry and professional services space. I specialize in designing secure applications and ensuring zero critical or high-risk issues for applications deployed to production. My expertise includes conducting comprehensive vulnerability assessments and penetration testing of enterprise applications, networks, and cloud environments. I have a proven track record of enhancing pipeline security by ensuring the complete integration of automated security testing tools in CI/CD pipelines, effectively mitigating risks and safeguarding organizational assets.

**TECHNICAL SKILLS**

**Security Testing:** Kali Linux, Metasploit, Nmap, SQLMap, Nessus, InsightVM, Burp Suite, Acunetix, MITRE ATT&CK.

**Cloud:** AWS Cloud, Google Cloud Platform (GCP), Azure Cloud.

**DevSecOps:** Docker, Kubernetes, Jenkins, Jfrog Artifactory, SonarQube, Veracode, OWASP ZAP, Acunetix, GitLab CI.

**Automation:** Python, Bash, PowerShell, Golang, Ansible, Javascript, Terraform, Java, PHP, C, C++, C#

**Databases:** MySQL, MongoDB, SQLite, PostgreSQL, Oracle, Microsoft SQL Server, DynamoDB, Cassandra, Redis.

**IT Governance and Risk:** COBIT, ISO/IEC 27001, NIST Cybersecurity Framework, Threat Modeling.

**Internal Controls:** SOX Compliance, IT General Controls (ITGC).

**Reporting and Documentation:** Microsoft Excel, Microsoft Access, SQL for data extraction and reporting.

**WORK EXPERIENCE**

**Principal/Manager Cybersecurity Assurance Safaricom PLC (Vodafone Group Subsidiary)**

Dec 2021 - Present

* Champion adoption and integration of DevSecOps tools like Veracode and OWASP ZAP within the CI/CD pipelines for automatic security scanning, reducing software pipeline security vulnerabilities by 40%.
* Create security automation scripts using Python and Bash, resulting in a 30% decrease in manual security compliance checks on servers and database systems.
* Manage the private bug bounty program, validating all reports, awarding and facilitating closure of reports by project teams within defined SLAs.
* Conduct red team exercises on applications in production, reporting on findings and facilitating closure of all issues within SLA.
* Conduct security assessments for all waterfall and agile projects before go-live, ensuring closure of all critical/high/Medium risk defects before project go-live.
* Coordinate cross-functional teams to implement security controls and practices required by PCI DSS, resulting in the organization attaining PCI DSS certification within 6 months.
* Developed comprehensive threat models for application security reviews using methodologies such as STRIDE and PASTA to identify potential vulnerabilities and prioritize mitigation strategies, ensuring robust security postures across projects.

**Assistant Manager Cybersecurity & Tech Risk Consulting Ernst & Young (EY)**

Feb 2019 – Dec 2021

* Conducted Central Bank of Kenya (CBK) cybersecurity compliance reviews for three leading Tier 1 and Tier 2 banks in Africa over a three-year period, facilitating closure of 95% of identified security gaps.
* Led a team of 5 cybersecurity consultants, ensuring delivery of high-quality security assessments and maintaining a client satisfaction rate of 98%.
* Managed project timelines, budgets, and resources, achieving a 95% on-time delivery rate.
* Implemented security frameworks and compliance standards such as ISO 27001, NIST, and PCI DSS, ensuring clients' adherence to industry regulations.
* Developed and delivered cybersecurity awareness training programs for clients, enhancing their security posture and reducing phishing incidents by 40%.
* Documented risk assessments and audit findings, prepared detailed reports, and presented actionable recommendations to management, aiding organizations in improving their IT governance processes.
* Assessed and tested IT General Controls (ITGC) for over 20 client systems, helping enhance internal control environments and reducing incidents.

**Database Administrator The Judiciary of Kenya**

Dec 2016 – Jan 2019

* Led a team of 3 database administrators, managing over 10 enterprise databases running on Oracle, PostgreSQL, Mongo and MySQL database systems across multiple environments, ensuring 95% uptime through optimized maintenance schedules and proactive monitoring.
* Cordinated database backup and ensured 99.9% backup success rate by automating the backup processes and conducting regular recovery drills.
* Conducted quarterly security audits and vulnerability assessments on the databases, reducing potential security threats by 50%.
* Improved database query performance by 25% through database tuning and indexing strategies.
* Successfully led the migration of over 5TB of data from legacy case management system database to modern a database platform on Cloud with zero data loss.

**Applications Developer World Agroforestry Centre (ICRAF)**

May 2014 – Dec 2016

* Developed a key research projects full-stack web application using JavaScript, HTML, CSS, and PHP Laravel, increasing project work visibility and research papers downloads by over 50%
* Implemented responsive design for the corporate website, resulting in a 40% increase in mobile traffic.
* Managed the migration of partners website from Joomla to WordPress, improving site performance and user experience by 60%.
* Integrated third-party services and APIs into the intranet web application, enhancing application functionality and user experience by 35%.

**EDUCATION**

**Strathmore University** MSC. Information Systems Security Aug 2018 – Dec 2021Nairobi, Kenya

**Kenyatta University** BSc. Computer Science Sep 2011 – Jul 2015Nairobi, Kenya

**CERTIFICATIONS**

* Certified Information Security Manager (CISM)
* Certified Information Systems Security Professional (CISSP)
* Certified Information Systems Auditor (CISA)
* Certified Ethical Hacker (CEH)
* AWS Certified DevOps Professional
* AWS Certified Solutions Architect
* AWS Certified Developer – Associate
* Google Cloud Certified Security Engineer Professional
* Microsoft Certified Azure Security Engineer
* API Security Architect

**ASSOCIATIONS**

* Member of International Information System Security Certification Consortium (ISC2)
* Member of Information Systems Audit and Control Association (ISACA)
* AWS Community Builder and ISACA Mentor

**PUBLICATIONS**

* Personal Blog - https://bmacharia.com
* Medium - https://medium.com/@bmacharia
* Dev.to - https://dev.to/bensonmacharia
* Github - https://github.com/bensonmacharia