

MARIEN BALOITCHA

VDC/BIM & Security Engineer

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SUMMARY

BIM/VDC & Cybersecurity Engineer with 7+ years in civil engineering and 2+ years in cybersecurity. I focus on bridging technologies and engineering by delivering reliable, secure solutions for smarter project delivery. With international experience and ongoing training in BIM (Revit, Navisworks, Civil 3D, Dynamo), I combine field expertise with digital innovation to strengthen infrastructure resilience. Passionate about research and applied problem-solving, I aim to drive forward projects where security, engineering, and emerging technologies intersect.

CERTIFICATIONS

- OSHA30
- BIM Professional Course for Civil Engineers - In Progress
- CompTIA Security + - In Progress

TECHNICAL SKILLS

- **Cybersecurity & Cloud Technologies:** AWS (EC2, VPC, S3), Azure, Prisma Cloud, OKTA, GuardDuty, IAM, CloudWatch, CloudTrail, Security Groups, VPC Peering, AWS Config, Azure Security Center
- **Security Tools & Techniques:** Splunk, Nessus, Burp Suite, Wireshark, SolarWinds, Penetration Testing, Risk Assessment, SIEM, CVE Analysis, Exploit Development, Threat Modeling, OWASP
- **Compliance & Governance:** NIST, ISO 27001, FedRAMP, FISMA, HIPAA, GDPR, PCI DSS, SOX, Data Classification, Data Encryption, User Behavior Analytics
- **BIM/VDC Software:** AutoCAD, Revit, Civil 3D, Navisworks, BIM Collaborate, Dynamo, Tandem, 4D BIM, 5D BIM, Clash Detection, ERDAS IMAGINE and ArcGIS
- **MS Office & Project**
- **Data visualization:** R.studio and Python

EXPERIENCE

Cybersecurity Analyst Intern

Dec 2024 – Present | KGS Technology Group, GA

- Integrated automated monitoring with Splunk, Wireshark, and SolarWinds, enabling real-time threat detection and incident response, and resolved 5 critical system vulnerabilities within the first month.
- Leveraged QRadar to identify and triage more than 20 high-priority security alerts daily, escalating critical incidents to senior analysts and preventing potential data breaches.
- Hardened over 30 critical systems using Ansible automation, exceeding the team goal of 25. Enhanced organization's security infrastructure by developing 15+ custom Ansible modules for automating security hardening tasks, leading to a 30% faster incident response time.
- Drafted and instituted an organization-wide password policy based on NIST guidelines, achieving zero reported phishing incidents related to weak passwords in the first three months after enforcement.

Blockchain Engineer Intern

Dec 2022 – Jun 2024 | Storj, Philadelphia, PA

- Bolstered data migration security by configuring AWS Identity and Access Management (IAM) roles, issuing 10+ least privilege access policies, and minimizing potential security breaches.
- Implemented weekly vulnerability scans using Nessus and Burp Suite, increasing the frequency of security assessments, resulting in a 95% identification rate of potential vulnerabilities.
- Developed and enforced comprehensive data loss prevention (DLP) strategies, preventing sensitive data leakage by 90% and ensuring compliance with evolving regulatory requirements.

Research Assistant

Oct 2022 – Feb 2023 | College of Engineering, CAEE Department, Drexel University, USA

Project: LIFE CYCLE ASSESSMENT OF SYSTEM-WIDE COASTAL STORM RISK MANAGEMENT in the New Jersey Back Bay (NJBB) region.

- Reviewed and synthesized relevant literature to inform project methodology and assumptions.
- Contributed in a full Life Cycle Assessment (LCA) of coastal storm risk management strategies.
- Performed data mining and analysis to support decision-making and environmental impact evaluation.

BIM & Quality Engineer

Dec 2021 – Sep 2022 | China Harbour Engineering Co, Benin

- Configured Autodesk BIM Collaborate Pro, automating data access controls for 20+ project stakeholders, and boosted data access compliance by over 40%, as the youngest engineer on the team.
- Led a team of 3 engineers in updating construction drawings for a \$162.4 million infrastructure project using AutoCAD and Revit Structure, ensuring 100% Eurocode 2 standards compliance and zero rework orders.
- Coordinated rock sampling logistics and documentation, ensuring proper shipment to international laboratories, resulting in zero delays to critical geotechnical testing in France and Belgium.
- Developed and implemented 8 new standardized construction procedures for critical maritime structures, reducing project delays by 10% and cutting material waste by 5% through optimized resource allocation.

Assistant BIM Coordinator

Jul 2019 – Dec 2021 | RUJWASCO, Kenya

- Drove coordination of a \$22.4M World Bank-funded sewer project, ensuring ASTM/ISO compliance, resulting in zero major incidents and the rapid promotion as BIM Coordinator.
- Validated sewer infrastructure designs using AutoCAD Civil 3D, resolving 95% of field technical interferences; efforts recognized by senior project managers as crucial to maintaining project timeline.
- Spearheaded clash detection with Navisworks Manage across 500+ construction documentation files, resulting in zero critical field issues and adhering to all ASTM and ISO standards.
- Conducted an in-depth water quality assessment, generating actionable research insights that informed system optimization and long-term sustainability strategies.

Field Engineer

Jul 2016 – Apr 2019 | SOGEA-SATOM, Benin

- Managed critical on-site construction activities including excavation, foundation layout, concrete casting, and structural framing for a \$15.7M office building, ensuring 100% adherence to design specifications, quality standards, and project schedules.
- Reduced material waste by 5% through accurate quantity takeoffs and material estimations using Autodesk Revit's built-in scheduling.

Vocational High-School Teacher

Feb 2017 – Apr 2019 | Lycee Technique F.M Coulibaly, Cotonou, Benin

- Classes taught: Construction Technology, BIM, Soil and Construction Material, Structural Design, Bill of Quantity and Pricing, Fundamentals of Civil Engineering drawings.
- Mentoring.

EDUCATION

- **Master of Science in Cybersecurity** | Drexel University, USA 2024
- **Master of Science in Civil Engineering** (Environmental & ASAL Option)
Pan African University Institute of Science, Technology, and Innovation (PAUSTI), Kenya- in progress
- **Bachelor of Science in Civil Engineering** | Institut Universitaire de Technologie de Lokossa (Current INSTI Lokossa), Benin 2016.

AWARD

- Dean's Fellowship and Lifshin Fellowship, Drexel University, USA
- Pan African University Scholarship, fully funded, Kenya.
- Benin Government Partial Scholarship

LEADERSHIP & ACTIVITIES

- Graduate Student Ambassador, Drexel University, USA | Dec 2022 – Dec 2023
- Vice-Captain of the PAUISTI soccerteam, PAUISTI, Kenya | June 2020 – Nov 2021
- Second Vice President of the National Union of STEM Students, Head of Sports and Arts, IUT Lokossa, Benin | May 2015 – June 2016,
- Ruway Coach, IUT Lokossa | June 2014 – Jul 2016

PUBLICATION

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