# Festus Boamah

IT educator and software engineer. Research interests in trustworthy AI, application security and privacy, with a focus on dependable digital systems for resource-constrained environments.

Accra, Ghana · b.festus@nerdsiv.com · festusboamah.com · github.com/festusboamah · LinkedIn

## EDUCATION

Completed Oct 2026 — **Master of Education (Information Technology)**
University of Cape Coast
Final examinations completed October 2026; awaiting graduation.

2020 – 2023 — **Bachelor of Education (Hons.), Information Technology**
Valley View University, Accra
Second Class Upper. Relevant coursework: Data Communications & Computer Networks, Enterprise Information Security, Operating Systems, Database Systems Design, Distributed Computing, Managing IT Projects, Computer Ethics.

2015 – 2018 — **Diploma in Basic Education**
Dambai College of Education (University of Cape Coast)
First Class.

## RESEARCH INTERESTS

- Security of AI applications: prompt injection, unsafe tool use and sensitive-data leakage in LLM-based software
- Privacy and verifiable digital systems: auditing, secure electronic voting, authentication and access control
- Artificial intelligence for cybersecurity: explainable threat detection, phishing and fraud detection

## RESEARCH AND APPLIED SECURITY WORK

2026 — **Security evaluation of a production web platform (festusboamah.com)**
Independent applied work
Threat-modelled the public contact API (assets, trust boundaries, attacker capabilities) and implemented defence in depth: input validation, honeypot, per-IP rate limiting, Cloudflare Turnstile, parameterised SQL and a strict Content Security Policy. Ranked the remaining weaknesses by risk in a published remediation plan, and secured the admin login with a least-privilege GitHub App. Documented in three technical articles (see Research outputs).

## RESEARCH OUTPUTS

### TECHNICAL ARTICLES (NOT PEER-REVIEWED)

10 Oct 2026 — **The real price of "free" AI**
festusboamah.com/writing/the-real-price-of-free-ai

7 Oct 2026 — **Small organisations, real data: AI and cybersecurity for civil society**
festusboamah.com/writing/ai-and-cybersecurity-for-civil-society

7 Oct 2026 — **Fixing my own findings: a remediation plan, ranked by risk**
festusboamah.com/writing/fixing-my-own-findings

7 Oct 2026 — **Locking the back door: how I secured my website's admin login**
festusboamah.com/writing/securing-my-website-admin-login

7 Oct 2026 — **Your phone number is not your identity: SIM swaps and mobile money**
festusboamah.com/writing/sim-swap-mobile-money-phone-numbers

7 Oct 2026 — **Threat-modelling a contact form: defence in depth on a very small API**
festusboamah.com/writing/threat-modelling-a-contact-form

### CREATIVE WRITING

2024 – 2026 **26 poems, short stories and a series, published as Elikem Inspires**
Poetic Koncept (poetickoncept.com)

## WORKSHOPS AND PRESENTATIONS

Oct 2026 **Leadership and entrepreneurship panel (guest panellist)**
Career Horizons Project, Gabi M.A Junior High School, Kpando
Spoke on entrepreneurship, starting with limited resources and learning from setbacks, to about 320 students.

Mar 2026 **Robotics for science teachers (workshop trainer)**
Basic STEM (BSTEM) teacher workshop, Teshie Presbyterian SHTS, Accra
Trained 16 science teachers, each from a different school, to assemble robots and use them in their teaching.

## TEACHING EXPERIENCE

Dec 2024 – present **Mathematics and Computing Facilitator**
Martey Tsuru Presby JHS, Accra

Dec 2019 – 2024 **Maths, Science, Career Tech. & Computing Facilitator**
Adjobue GCD D/A Basic School

Apr – Jul 2022 **ICT Teaching Assistant (internship)**
St. Francis Senior High Technical School

Jan – Nov 2019 **English Teaching Assistant (National Service)**
Baatsona TMA JHS

## PROFESSIONAL EXPERIENCE

2025 – present **Co-Founder and Software Engineer**
Nerds IV Technologies, Ho
Independent product studio: 12 software products, 11 live in production, across education, retail and healthcare. Includes Balotiq (tenant-isolated e-voting with encrypted secret ballots, a hash-chained ledger and an immutable audit trail), suku360 (school operating system with role-based access and offline attendance) and Boafo AI (WhatsApp customer service with AI-assisted replies). Backend engineer for AfeHab, a verified-rentals platform in the Volta Region.

2019 – present **Founder**
PagezTech Ventures, Accra
Online store for phones, laptops, accessories, data bundles and WAEC results checkers, with online payments and delivery across Ghana. Also operates Boafo AI.

## CERTIFICATIONS AND PROFESSIONAL TRAINING

In progress **Google Cybersecurity Professional Certificate**
Google (Coursera), through the One Million Coders Programme
Preparing for CompTIA Security+.

In progress **Founders Academy**
ALX

In progress **Front-end Web Development**
ALX

Jun 2026 **Foundations of Cybersecurity**
Google (Coursera)

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| Mar 2026 | **Microsoft SQL Server series: SQL Foundations; Data Manipulation and Transactions; Indexing, Performance Optimization & Functions; Relational Database Design and Advanced Querying**<br>Coursera |
| Mar 2026 | **Excellence in Online Teaching (with honours)**<br>Johns Hopkins University (Coursera) |
| Jun 2025 | **Certified Data Protection Officer (CDPO)**<br>Data Protection Commission, One Million Coders Programme |
| Sep 2024 | **AI Career Essentials**<br>ALX |
| Apr 2023 | **National Cybersecurity Awareness Month: "A Safe Digital Ghana"** |
| Jun 2022 | **An Assessment of Cybersecurity Readiness of Businesses and Individuals**<br>IIPGH |
| Mar 2022 | **Cybersecurity Training for Teachers**<br>Commonwealth of Learning and NTC |
| Jun 2021 | **Teaching in a Digital Age**<br>National Teaching Council (NTC) |

## TECHNICAL SKILLS

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| **Security and data protection** | Threat modelling, least-privilege access, audit trails, encryption, strict web security headers |
| **Languages** | JavaScript, TypeScript, HTML, CSS, SQL, Java, C++ |
| **Platforms and tools** | Microsoft SQL Server, Cloudflare (Pages, Workers, D1), Git, GitHub Actions, REST APIs, WordPress and WooCommerce, Paystack, Figma, Adobe Creative Suite |

## PROFESSIONAL MEMBERSHIPS

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| 2023 – present | **United Nations Youth Ghana Initiative** |
| 2021 – present | **Ghana Society of Education Technology** |
| 2020 – present | **Institute of ICT Professionals Ghana** |
| 2019 – present | **Ghana National Association of Teachers (GNAT)** |
| 2017 – present | **Young African Leaders Initiative (YALI Network Ghana)** |

## SERVICE AND OUTREACH

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| Oct 2026 | **Volunteer, planning committee member, Career Horizons Project**<br>Career Leadership Development Fair 2026, Gabi M.A Junior High School, Kpando |
| Aug 2026 – present | **Founder, Boys Club Initiative**<br>Martey Tsuru Presby JHS, Accra<br>A structured mentorship programme on discipline, responsibility and leadership. |
| Jun 2026 | **Delegate for COMoG, Ghana Civil Society Forum 2026**<br>University of Ghana<br>Sessions included responsible use of AI and cybersecurity in civil society. |
| May 2026 | **Volunteer, PadHER Project: menstrual hygiene education for 150 learners, Ho**<br>COMoG |
| 2023 – present | **Volunteer**<br>United Nations Youth Agency |

2018 – present **Volunteer: yearly Child Online Protection campaigns**
TLPCI Child Development Centre

References available on request.