John Anthony Adenu-Mensah

Accra, Ghana · adenumensahjohn@gmail.com · jadenu.dev · github.com/Men5ah · LinkedIn · men5ah.itch.io

Profile

Computer science graduate who builds across security, machine learning, web and games. Most at home tracing problems to their root cause, whether that is a vulnerable endpoint, a model failing on noisy data or a broken CI pipeline. Documents what I learn in a public knowledge base of security writeups.

Education

Ashesi University, Berekuso, Ghana — B.Sc. Computer Science, June 2025

Thesis: Machine Learning-Based Detection of Credential Stuffing Attacks

Projects

ML Credential Stuffing Detection (Thesis) · Python, RNN/LSTM/ConvLSTM · GitHub · Sep 2024 – Mar 2025

- Built an end-to-end system: synthetic human and bot login data generation, model training, a bot simulator and a deployed web front-end serving the best model.
- Benchmarked RNN, LSTM and ConvLSTM models; strong accuracy on clean data, with clear gaps under noisy conditions.
- Concluded that real defense needs continuous retraining and layered controls, not behavioral profiling alone.

VaultNotes: Application Security Assessment · Python, Flask, Bandit, OWASP ZAP · GitHub · Sep 2026

- Built, then attacked, a deliberately vulnerable Flask app; found and fixed 7 OWASP Top 10 vulnerabilities, including SQL injection, stored XSS, SSRF, IDOR and broken authentication.
- Cut OWASP ZAP findings from 3 High / 5 Medium to zero using manual testing plus SAST (Bandit) and DAST (ZAP).

- Showed that scanners caught every injection bug but missed every access-control flaw; wrote a full report with PoC exploits, root causes and fix code.

Elinhavn: Game Development Capstone · Godot, GDScript · Play · GitHub · Mar – May 2025

- Designed and built a complete game: scene composition, gameplay scripting, custom shaders, UI systems, dialogue and audio.

Writeups: Security Knowledge Base & CI/CD Pipeline · GitHub Actions, Node.js, Quartz · Live · Aug 2026 – present

- Solve CTFs on picoCTF and OverTheWire (web exploits, reverse engineering, forensics) and publish each writeup to a searchable site on every push.
- Debugged the pipeline to root cause through a chain of failures: Node version conflicts, Windows symlinks, a breaking config migration, CI permissions and a silent CLI flag bug.

EmoBot: Speech Emotion Recognition · Python, Streamlit · GitHub · Nov – Dec 2023

- Built an LSTM model classifying emotion from speech using MFCC features from four datasets (TESS, SAVEE, RAVDESS, CREMA); deployed it as a Streamlit app that predicts from uploaded audio.

BuddyMatch: Peer-Matching Web App (team of 4) · HTML, CSS, JavaScript · GitHub · Jul – Aug 2024

- Took an app matching users with study or activity partners through a full SDLC, from requirements and design to implementation.

Other projects

- **NESTED** (Jan 2026): daily word-puzzle web game in JavaScript. Play
- **A Very Serious Game About Energy Production** (Jun 2026): incremental game built for the Juniper Dev Game Jam. Play
- **Court.**: tennis score tracker web app for scores, sets and matches. Live
- **FIFA Rating Prediction** (Oct 2023): regression pipeline with data cleaning, feature selection and a deployment script. GitHub

Experience

Faculty Intern, Dept. of Computer Science and Information Systems · Ashesi University · Aug 2025 – Aug 2026

- Helped design and refine lecture materials for Object-Oriented Programming and Introductory Python, reworking examples and in-class activities.
- Led weekly lab tutorials for 50+ students, spotting and correcting common misconceptions from lectures.
- Held office hours and gave written code feedback, coaching students to debug their own work rather than handing them fixes.

Certifications

- **Cybersecurity Job Simulation**, Mastercard via Forage, Aug 2026: designed a phishing email simulation and interpreted its results.
- **Foundations of Cybersecurity**, Google via Coursera, Jul 2023. Verify

Skills

- **Languages:** Python, Java, JavaScript, SQL, HTML/CSS, GDScript
- **Security:** OWASP Top 10, web app penetration testing (black-box and white-box), SAST (Bandit), DAST (OWASP ZAP), CTFs, vulnerability remediation, security reporting
- **ML and data:** LSTM/RNN/ConvLSTM, regression, feature engineering, audio signal processing (MFCC), synthetic data generation
- **Tools:** Git and GitHub, GitHub Actions (CI/CD), Flask, Streamlit, Node.js, Godot, Linux