

David Mawuko Torkornoo

Bristol Based – open to travel or relocation

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Linked in Profile Link: [David Mawuko Torkornoo | LinkedIn](#)

GitHub Profile Link: <https://github.com/Davemtork?tab=repositories>

Profile

First-Class Honours Computer Science graduate passionate about software quality and automation. Solid foundation in system software, embedded development, and test-driven development. Experienced in Python, Bash, and Linux environments, with strong analytical and problem-solving skills. Proven track record in building secure, data-driven applications and conducting security data analytics. Eager to start a career in any Technology field and grow through continuous learning and industry certifications.

Education & Qualifications

University of the West of England - BSC(HONS) COMPUTER SCIENCE (SW) 2021 – 2024

Computer systems architecture, Artificial intelligence I & II, Web development and databases, Principles of programming, Foundations of computing, Internet of Things, Operating Systems, Advanced Algorithms, Mobile Applications, Security Data Analytics, Advanced Databases, Systems Development.

3rd Year Research Project Title: Facial Recognition System for Student Registration in a University

The study involved enhancing facial recognition accuracy and efficiency using the Haar Cascade algorithm. Optimized and deployed advanced models to demonstrate AI's effectiveness in high-demand environments, showcasing the evolution of facial recognition technologies.

City of Bristol College - BTEC Level 3 National Extended Diploma Computing 2019 - 2021

Overall Grade: Distinction, Distinction, Merit

City of Bristol College – City and Guilds Level 2 in ICT Systems and Principles 2018 - 2019

Install and Configure ICT Equipment and Operating Systems: Distinction

Install, Configure and Maintain Software: Distinction

ICT Repair Centre Procedure 2: Distinction

Customer and Support Provision: Merit

Principles of ICT Systems and Data Security: Merit

Using the Internet: Pass

Key Skills

- Programming Languages: Python, C, Bash, JavaScript, (familiar with C#)
- Testing & QA: Test-Driven Development, Unit Testing, Python Automation, Data Validation, Bug Tracking.
- Agile Practices: Agile & Kanban methodologies, Scrum basics
- Systems & Tools: Linux, Git, Docker, VirtualBox, VS Code, Anaconda, Jupyter Labs

- **Automation Tools:** Familiar with testing frameworks (pytest, unittest), Continuous Integration principles
- **Database Technologies:** MySQL, MongoDB

Academic & Technical Projects

- **Security Data Analytics Investigation with Python**
Description: Successfully completed a comprehensive portfolio assessment focusing on cyber security data analytics, where I tackled a series of complex challenges across three different datasets using Python. Each part of the portfolio built upon advanced data analytic techniques, culminating in the application of data visualization methods to identify and articulate potential security threats.
Achievements:
Skill Development: Developed robust data processing pipelines to manage and analyse security datasets, enhancing my ability to interpret and utilize data effectively.
Problem Solving: Applied analytical and visualization techniques to detect anomalous activities within data, showcasing my capability to derive meaningful insights from complex information.
Reflective Learning: Provided detailed reflective summaries that demonstrated a clear understanding of the methods used and the rationale behind my analytical decisions, aligning with the best practices discussed in lectures.
Technologies Used: Python, Pandas, Matplotlib, Jupyter labs.
Grade Achieved: 82%
- **Facial Recognition Project with Python and Haar Cascade Classifier**
How It Was Done:
 - Implemented facial detection using OpenCV and Haar Cascade Classifier. Emphasized real-time performance, data accuracy, and usability under varied lighting conditions.
 - Trained the Haar Cascade Classifier with datasets to recognize facial patterns.
 - Captured live video feeds from a camera for real-time detection.
 - Optimized the detection algorithm for performance and accuracy in various lighting conditions.
 - Outcome: Successfully deployed a facial recognition system using Python and Haar Cascade Classifier, which accurately detected and recorded faces into a spreadsheet in real-time, even under varying lighting conditions. I achieved 66%
- **Booking Website for Patients and Doctors**
Description: Developed a comprehensive web application to streamline interactions between patients, doctors, and medical staff. Utilized the Django framework following the Model-View-Template (MVT) architecture to ensure a clean separation of concerns and enhance maintainability of the application. Ensured data integrity and conducted test-driven development to validate user flows and API endpoints.
Technologies Used:
Django & Django Rest Framework (DRF): Leveraged Django's capabilities for robust backend operations and Django Rest Framework for building APIs, ensuring seamless data interchange and integration with front-end functionalities.
MySQL: Employed MySQL to handle complex data associated with user information, medical prescriptions, and appointment scheduling. Designed a relational database schema to support efficient data retrieval and secure storage of sensitive information.
Docker: Deployed the application and its database using Docker containers to encapsulate the environment, ensuring consistency across different development and production settings. This setup simplified the deployment process and improved scalability and portability.
User Authentication and Authorization: Implemented detailed user authentication mechanisms to differentiate access levels between admins, doctors, nurses, and patients. Created secure

login systems and role-based dashboards that provided customized interfaces and functionalities for each user type.

Data Management and Security: Managed sensitive data such as medical records and prescription details with strict adherence to privacy regulations. Utilized Django's security features to safeguard against common vulnerabilities like SQL injection and cross-site scripting.

Outcome: The project successfully delivered a functional and secure platform that improved the scheduling efficiency and data management for medical professionals and patients. The use of Docker for deployment facilitated quick rollouts and easy updates, demonstrating an effective use of modern technology in healthcare solutions. I achieved 67%

- **Mobile Development Weather App Using Kotlin**

How It Was Done:

Developed the app in Android Studio using Kotlin.

Integrated a weather API (like OpenWeatherMap) to fetch real-time weather data.

Created an intuitive user interface with RecyclerView for displaying weather details.

Implemented features like location-based weather updates and search functionality.

- **Building a game for primary school kids in C#**
- **Building a system for a car manufacturing company in Python**
- **Building an Arduino capable of sending signals to other Arduinos to control their hardware.**
- **Building search Algorithms in Python**
- **Artificial Intelligence and Genetic Algorithm's in Python**
- **Building System Calls for an Operating System in PINTOS**

Work Experience

E5 Tech Team Audio and Visuals Technician | E5 Bristol

Jan 2018 to Jan 2022

- Audio/Visual Technician – E5 Bristol | Jan 2018 – Jan 2022
- • Delivered technical support during live events, including setup of AV systems and troubleshooting under pressure.
- Gained strong communication and problem-solving skills in time-sensitive environments.

Argos Warehouse Operator

January 2022 -2025

- Used WES system to track item movements and check stock levels for accurate inventory control.
- Order Picking & Packing
- Health & Safety Compliance
- Work as part of a team to meet daily/weekly targets.
- Load and unload delivery vehicles safely.

Unique Voice – As a Production Packer

11th August 2021

Working in teams to produce boxes of contents for children.

Interests

- Programming in Python and C
- Table Tennis
- Basketball
- Repairing Computers
- Reading

Certifications & Tools Familiarity

- Proficient in Git for version control
- Familiarity with Continuous Integration systems
- Awareness of security principles and compliance (Data Protection Act, secure development practices)

References

Available for Request

