COE 454

Flashy – Automated Flashcard Generator

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| --- | --- | --- |
| FRIMPONG PRINCE | PROJECT MANAGER |  |
| ANSAH EMMANUEL NYAMEKYE | user experience designer |  |
| appiah ebenezer kofi | frontend developer |  |
| donkor emmanuel kofi | backend developer |  |
| yirenkyi kelvin | backend developer |  |
| adu-botchway ronard | ocr/nlp specialist |  |
| darkey sylvester | database administrator |  |

# **Description**

Flashy is a cross-platform application designed to enhance the study experience for students by automating the creation of flashcards from lecture slides and textbooks. Students can upload their educational materials and Flashy will extract key information and generate concise, effective flashcards. These flashcards will be continuously accessible, ensuring that students have an ever-present, convenient study tool right on their screens.

The primary objective of Flashy is to streamline the study process for students at KNUST by providing an automated platform for creating and reviewing flashcards. This tool aims to improve study efficiency and retention by ensuring that crucial information is readily accessible, reducing the time and effort students spend on manual note-taking and flashcard creation.

# **Significance**

* **Time Efficiency**: Flashy automates the time-consuming process of creating flashcards, allowing students to focus more on studying rather than preparation.
* **Stress Reduction**: By reducing the manual effort involved in note-taking and flashcard creation, Flashy helps decrease study-related stress.
* **Academic Performance**: Flashy aids in better organization and review of study materials, potentially leading to improved academic performance.
* **Convenient Study Tool**: Flashcards are always at hand, providing an ever-present, convenient study tool for students.
* **Collaboration and Peer Learning**: The ability to share flashcards and engage in group study sessions enhances collaborative learning among students.

# **Requirements**

Flashy is designed to enhance the study experience for students by automating the creation of flashcards from lecture slides and textbooks. Below is are the functional and nonfunctional requirements of Flashy to ensure it meets the needs of its users effectively and efficiently.

## **Functional Requirements**

1. **File Upload**

***Description****:* Users should be able to upload lecture slides and textbooks in various formats.

***Details***:

* Supported Formats: PDF, PPT, DOCX.
* User Interface: A drag-and-drop interface and file selection dialog should be provided for file uploads.
* File Size Limit: The system should handle large files (up to 200MB) efficiently.
* Validation: Ensure that only supported file types are uploaded and provide error messages for unsupported formats.

1. **Flashcard Generation**

***Description***: The system should automatically extract key information from uploaded files and generate flashcards.

***Details***:

* Automatic Extraction: Use Optical Character Recognition (OCR) and Natural Language Processing (NLP) to extract text and summarize key points.
* Manual Edits: Users can manually edit generated flashcards or create new ones from scratch.
* Quality Assurance: Ensure the accuracy of the extracted text and relevance of the generated.

1. **Flashcard Organization**

***Description***: Flashcards should be organized for easy access and study.

***Details***:

* Categorization: Flashcards should be categorized by subjects, topics, and chapters.
* Search Functionality: Implement a search feature to allow users to quickly find specific flashcards.
* User Interface: Provide a dashboard for users to view and manage their flashcards.

1. **Collaboration**

***Description***: Enable users to share flashcards and collaborate with peers.

***Details***:

* Sharing Options: Users should be able to share individual flashcards or entire sets with other users.
* Group Study: Implement group study sessions where multiple users can review and discuss flashcards in real-time.
* Permissions: Control sharing permissions to allow read-only or editable access.

1. **Notifications**

***Description***: Keep users informed with timely notifications.

***Details***:

* Study Reminders: Send reminders for scheduled study sessions.
* Feature Updates: Notify users of new features and updates.
* Customization: Allow users to customize their notification preferences.

## **Nonfunctional Requirements**

1. **Performance**

***Description***: The application should perform efficiently under all conditions.

***Details***:

* Load Times: Ensure quick loading times for the application and all its features.
* Handling Large Files: Optimize file upload and processing times, especially for large documents.
* Scalability: Maintain performance as the number of users and the volume of data grows.

1. **Usability**

***Description***: The application should be easy to use and navigate.

***Details***:

* Intuitive Interface: Design a user-friendly interface with clear navigation and minimal learning curve.
* Help Sections: Provide help sections and tooltips to guide users.

1. **Reliability**

***Description***: The application must be reliable and available.

***Details***:

* Uptime: Ensure the application is available 99.9% of the time.
* Data Backup: Implement regular data backup and recovery mechanisms to prevent data loss.
* Error Handling: Develop robust error handling to manage and recover from unexpected issues.

1. **Security**

***Description***: Protect user data and ensure secure interactions.

***Details***:

* Data Encryption: Use encryption to protect user data both at rest and in transit.
* Data Privacy: Ensure compliance with data protection regulations

1. **Scalability**

***Description***: The system should scale smoothly as demand increases.

***Details***:

* Horizontal Scaling: Design the system architecture to support horizontal scaling for handling increased load.
* Future Features: Ensure the system is flexible enough to incorporate future features without major overhauls.
* Resource Management: Optimize resource usage to handle peak loads efficiently.

1. **Compatibility**

***Description***: Ensure the application works seamlessly across various platforms.

***Details***:

* Cross-Platform Support: Develop the application to work on Windows, macOS, iOS, and Android.
* Responsive Design: Ensure the user interface is responsive and functions well on different screen sizes and resolutions.

1. **Maintainability**

***Description***: The application should be easy to maintain and update.

***Details***:

* Modular Code: Write modular, well-documented code to facilitate easy updates and maintenance.
* Documentation: Maintain comprehensive documentation for developers and users.
* Continuous Improvement: Regularly update the application to fix bugs, improve performance, and add new features.

# **Identified Roles for Executing the Project**

* **Project Manager: Frimpong Prince**

Justification: The Project Manager will oversee the entire project, ensuring clear communication and coordination among team members, tracking progress, and managing risks.

* **User Experience (UX) Designer: Ansah Emmanuel Nyamekye**

Justification: To ensure the application is user-friendly and meets the needs of students.

* **Frontend Developer: Appiah Ebenezer Kofi**

Justification: Frontend developer will see to the development of the user interface, ensuring a responsive and intuitive design.

* **Backend Developers: Kelvin Yirenkyi and Donkor Emmanuel Kofi**

Justification: Backend developers will handle the server-side development, including setting up the server, developing APIs, and ensuring secure and efficient data handling.

* **OCR/NLP Specialist: Adu-Botchway Ronard**

Justification: Develop and integrate the OCR functionality and implement NLP algorithms to generate flashcards from extracted text.

* **Database Administrator: Darkey Sylvester**

Justification: Design and manage the database, ensuring efficient data storage and retrieval, and integrate cloud storage solutions.

# **Responsibilities of Each Role**

**Project Manager**

* Oversee the entire project lifecycle.
* Coordinate team meetings and ensure clear communication.
* Track project progress and ensure deadlines are met.
* Manage risk and handle any issues that arise.

**User Experience (UX) Designer**

* Conduct user research and gather feedback.
* Design wireframes and prototypes.
* Improve the overall user experience through iterative design.

**Frontend Developer**

* Develop the web application interface.
* Ensure responsive design and smooth user experience.
* Implement the file upload interface and flashcard display.

**Backend Developers**

* Set up the server.
* Develop APIs for file upload and flashcard management.
* Ensure secure communication between the frontend and backend.

**OCR/NLP Specialist**

* Develop OCR functionality to extract text from images.
* Implement NLP algorithms to generate flashcards.
* Optimize the text extraction and summarization process.

**Database Administrator**

* Design and manage the database.
* Ensure efficient data storage and retrieval.
* Set up cloud storage for managing uploaded files.

**FRIMPONG PRINCE**

**CONTACT INFORMATION**

* Email: [frimpongprince2000@gmail.com](mailto:frimpongprince2000@gmail.com)
* Phone: +233 54 073 4085
* LinkedIn: <https://www.linkedin.com/in/prince-frimpong-aa4809301/>
* Github: https://github.com/pfrimpong11
* Address: 123 KNUST Campus, Kumasi, Ghana

**PROFESSIONAL SUMMARY**

A results-driven Project Manager with over 3 years of experience in leading cross-functional teams to deliver high-quality software solutions. Skilled in project planning, risk management, and stakeholder communication, with a proven track record of managing projects from conception to completion within scope, time, and budget constraints. Adept at using Agile methodologies to enhance team collaboration and productivity.

**EDUCATION**

**Kwame Nkrumah University of Science and Technology**

* Bachelor of Science in Computer Engineering
* Graduation Year: 2024
* Relevant Courses: Software Engineering, Project Management, Systems Analysis, and Design

**PROFESSIONAL EXPERIENCE**

**XYZ Tech Solutions, Accra, Ghana**

*Project Manager*

*June 2019 – Present*

* Successfully managed 10+ software development projects, leading to a 95% client satisfaction rate.
* Developed detailed project plans, including scope, schedule, budget, resource allocation, and risk management plans.
* Coordinated with cross-functional teams to ensure project deliverables were completed on time and within budget.
* Facilitated Agile ceremonies (daily stand-ups, sprint planning, retrospectives) to promote team collaboration and continuous improvement.
* Communicated project status, risks, and issues to stakeholders, ensuring transparency and alignment.
* Implemented project management best practices, resulting in a 20% increase in project delivery efficiency.

**ABC Innovations, Kumasi, Ghana**

*Assistant Project Manager*

*January 2017 – May 2019*

* Assisted in the planning and execution of software development projects.
* Monitored project progress and provided regular updates to the senior management team.
* Conducted risk assessments and developed mitigation plans.
* Coordinated project resources and facilitated communication between team members and stakeholders.
* Contributed to the development and maintenance of project documentation.

**SKILLS**

* Project Management: Agile, Scrum, Waterfall, Kanban
* Tools: Jira, Trello, Microsoft Project, Asana, Slack
* Risk Management
* Stakeholder Communication
* Team Leadership
* Resource Planning
* Budget Management
* Quality Assurance
* Problem-Solving
* Time Management

**CERTIFICATIONS**

* Certified ScrumMaster (CSM) – Scrum Alliance
* Project Management Professional (PMP) – Project Management Institute
* ITIL Foundation Certification – AXELOS

**PROJECTS**

**Flashy - Automated Flashcard Generator**

*Project Manager*

*May 2024 – Present*

* Leading a team of seven to develop an application that automates the creation of flashcards from lecture slides and textbooks.
* Overseeing project planning, scope definition, and risk management.
* Ensuring clear communication and coordination among team members.
* Tracking project progress and ensuring milestones are met within deadlines.

**EduTech Platform**

*Project Manager*

*July 2022 – December 2022*

* Managed the development of an online educational platform that provides interactive learning resources.
* Coordinated with educators, designers, and developers to create engaging content.
* Implemented Agile methodologies to streamline development processes and improve team collaboration.

**LEADERSHIP AND VOLUNTEER EXPERIENCE**

**KNUST Student Developers Club**

*President*

*September 2021 – August 2022*

* Led the club in organizing workshops, hackathons, and seminars to enhance student skills in software development.
* Coordinated with industry professionals to provide mentorship and networking opportunities for club members.
* Managed the club’s budget and resources, ensuring efficient use of funds for events and activities.

**Tech for Good Initiative**

*Volunteer Project Manager*

*June 2020 – December 2020*

* Led a team of volunteers to develop a mobile app for a local non-profit organization.
* Planned and executed the project, ensuring timely delivery of the app within budget.
* Facilitated communication between the non-profit organization and the development team to align on project goals.

**REFERENCES**

**Mr. William Coleman**

Senior Project Manager

XYZ Tech Solutions

Email: willie.cole@xyztechsolutions.com

Phone: +233 24 765 4321

**Mrs. Jane Smith**

Director of Operations

ABC Innovations

Email: jane.smith@abcinnovations.com

Phone: +233 24 678 9012

YIRENKYI KELVIN OFOSU

gr8kelvin@gmail.com| 0507264580

PROFILE

I am a self-motivated final-year Computer Engineering student with a keen interest in AI and robotics. My academic background has equipped me with strong skills in programming, machine learning, and hardware-software integration. I am recognized for my excellent problem-solving abilities, technical proficiency, and innovative thinking. I am adept at working in collaborative environments and achieving exceptional results. I excel in research, development, and quality-driven projects and I am eager to leverage my skills and education to drive advancements in AI and robotics.

EDUCATION

**BSc. Computer Engineering Expected September 2024**

Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana

**W.A.S.S.C.E (Business) September 2017 – September 2020**

Presbyterian Boys’ Secondary School, Accra, Ghana

WORK EXPERIENCE

**Slaff Ghana Limited, Tema.**

September 2023 – December 2023

* Assisted senior technicians in day-to-day activities, gaining hands-on experience in electrical, civil, and telecommunication services.
* Supported in solar installation, troubleshooting electrical wiring, generator installation and telecommunication cable termination. Developed strong problem-solving and technical skills through practical application and mentorship.

ACHIEVEMENTS/AWARDS

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| House Prefect | January, 2020 | Presbyterian Boys’ Secondary School |
| Assistant School Prefect | September, 2017 | Tema Christian Center School |

PROFESSIONAL TRAINING/ CERTIFICATION

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| --- |
| AWS Certified Data Engineer |
| Cisco Certified Network Technician |

SKILLS AND ABILITIES

* Coding Languages: Python, C, C++, Dart
* Database Proficiency: PostgreSQL, Firebase Cloud Firestore
* Strong technical and problem-solving skills

REFEREES

Mr. Larry Donkor

SLAFF GHANA

CEO Slaff Ghana

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Email: lbdonkor@slaffghana.com

Mr. Solomon Andoh

Cardinal Namdini

Project Control Engineer

Phone: +233 244 8080 38

Email: narmdinimininglimited@gmial.com

**Ansah Nyamekye Emmanuel**

Kumasi | (+233) 598-296-141 | [manuelansah955@gmail.com](mailto:manuelansah955@gmail.com)

Summary

With over 6 years of experience as a software developer, I specialize in coding, reviewing program functionality, and implementing system improvements with a strong focus on security testing. I am proficient in developing software for desktop computers, cloud integrations, and mobile devices. Additionally, I have hands-on experience in machine learning and networking, enhancing my expertise in delivering innovative and robust solutions across diverse technological landscapes.

Education

**Kwame Nkrumah University Of Science And Technology**

***Jan '20-Sep '12***

Computer Engineering

Experience

**TechScape Solutions, Senior Software Engineer**

***Apr '21 – Jun ‘24***

Led a cross-functional team of 5 engineers in the design and deployment of microservices architecture

Implemented DevOps practices, reducing deployment times by 40% and improving system reliability

Developed a machine learning-driven recommendation system, increasing user engagement by 25%

Conducted regular code reviews and mentored junior developers to foster a culture of continuous learningCrane & Jenkins, Software Developer

**TechSphere Technologies, Software Development Manager**

***Jan '22 – April ‘22***

Directed a team of 16 developers in the design and implementation of scalable cloud-native applications

Initiated and managed a project to migrate legacy systems to a modern microservices architecture, reducing operational costs by 30%

Led efforts in adopting Agile methodologies, resulting in 50% faster time-to-market for new features

Implemented advanced analytics solutions, improving data-driven decision-making processes

Utilized Cadsoft Eagle for PCB design and schematic capture, ensuring efficient hardware integration

**Skyline Innovations, Lead Software Engineer**

***Sep '20 – Dec ‘21***

Led the development and deployment of scalable cloud solutions for 50+ enterprise clients

Managed a team of 10 engineers in implementing agile methodologies, resulting in 30% faster project delivery

Implemented AI-driven analytics platform, improving client retention by 15%

Enhanced cybersecurity protocols, achieving ISO 27001 certification

Certifications

* Bachelor of Engineering
* Certified Software Development Professional (CSDP)
* AWS Certified Solutions Architect
* CISCO Networks Certified
* Certified Scrum Master (CSM)
* Zindi Competition Certification

Skills

* Coding Languages: Python, C++, C, Javascript, CSS, HTML
* Databases Proficiency: MySQL, PostgreSQL, MongoDB
* Source Control Management: Git
* Report Control Management: Notion
* Testing Proficiency: Unit Testing, Integration Testing, System Testing

Referees

* Prof. Emmanuel K. Akowuah

Head of Department

Department of Computer Engineering

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**Ronard Adu-Botchway**

Bulemin, Gbawe, Accra

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Phone: 0550148009

LinkedIn: Ronard Adu-Botchway (https://www.linkedin.com/in/ronard-adu-botchway)

GitHub: radubotchway (https://github.com/radubotchway)

**Career Objective**

Passionate and dedicated final-year Computer Engineering student at Kwame Nkrumah University of Science and Technology, seeking an opportunity to leverage my technical skills and academic knowledge in a challenging and growth-oriented environment. Eager to contribute to innovative projects and develop solutions that drive technological advancements in Africa.

**Education**

Kwame Nkrumah University of Science and Technology (KNUST)

Bachelor of Science in Computer Engineering

Expected Graduation: September 2024

Relevant Coursework: Data Structures and Algorithms, Operating Systems, Computer Networks, Machine Learning, Database Systems, Software Engineering, Embedded Systems

**Technical Skills**

Programming Languages: Python, Java, C++, JavaScript, Postgres, Matlab

Web Development: HTML, CSS, JavaScript, Flask, React

Machine Learning: TensorFlow, Keras, OpenCV, PyTorch

Database Management: MySQL, PostgreSQL, SQLite

Tools & Platforms: Git, Docker, Jupyter, VS Code

Operating Systems: Windows, Linux

**Projects**

Skin Disease Diagnosis Tool

Flask Application

-Developed a web application for skin disease diagnosis using TensorFlow/Keras and OpenCV for image processing and model prediction.

- Implemented image uploading, preprocessing, and prediction functionalities.

- Designed a user-friendly frontend with integrated signup and login pages for secure user management.

- Utilized MobileNetV2 architecture and data augmentation techniques for model training and improvement.

Online Bookstore Management System

Full-Stack Application

- Created a comprehensive online bookstore management system using React for frontend and Flask for backend.

- Implemented functionalities for book listings, user authentication, and purchase transactions.

- Ensured secure data handling and efficient database management with PostgreSQL.

Smart Home Automation System

Embedded Systems Project

- Designed and developed a smart home automation system using Raspberry Pi and various sensors.

- Programmed automation scripts in Python for controlling home appliances remotely.

- Integrated a web interface for monitoring and managing the system.

**Experience**

Software Development Intern

Ecobank, Ghana, Accra

October 2023 – December 2023

- Assisted in the development and testing of web applications using Python and Flask.

- Collaborated with senior developers to implement new features and fix bugs.

- Participated in code reviews and contributed to improving code quality.

Research Assistant

KNUST Computer Engineering Department

September 2022 – November 2022

- Assisted in research on machine learning algorithms for predictive analytics.

- Conducted experiments and analyzed data to validate research findings.

**Certifications**

- Network Technician Career Path – CISCO, 2024

- AWS Academy Data Engineering – AWS Academy, 2024

- AWS Academy Introduction to Cloud Semester 1 – AWS Academy, 2024

- AWS Academy Introduction to Cloud Semester 2 – AWS Academy, 2024

- AWS Academy Cloud Foundations – AWS Academy, 2024

**Leadership & Extracurricular Activities**

President

Gospel Light International Church Campus Ministry, KNUST

January 2024 – September 2024

- Led a team of approximately 30 members to organize and coordinate weekly worship services, Bible study sessions, and prayer meetings.

- Planned and executed large-scale events such as conferences, retreats, and outreach programs, attracting over 200 participants.

- Facilitated leadership training and development workshops to equip members with effective ministry skills.

- Managed the ministry's social media presence and digital communication, increasing engagement and outreach.

- Collaborated with other campus ministries and organizations to foster a sense of community and shared mission.

Volunteer

Tech4Good Initiative

January 2024 – March 2024

- Participated in community outreach programs to teach coding and basic computer skills to underprivileged students in Kumasi.

**References**

Dr. Andrew Selasi Agbemenu

Professor of Computer Engineering

Kwame Nkrumah University of Science and Technology

Email: Andrew.selasi.agbemenu@gmail.com

Phone: +233 20 460 8600

Mr. William Sam Essel

Ecobank McCarthy Hill Branch Manager

Ecobank Ghana Ltd.

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Phone: +233 24 230 7094

Right Rev. Matthew Addae Mensa

Presiding Bishop

Gospel Light International Church

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EBENEZER KOFI APPIAH

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**PROFESSIONAL SUMMARY**

Passionate Frontend Developer with expertise in building responsive and user-friendly web applications. Skilled in JavaScript, React, HTML, and CSS, with hands-on experience in improving UI/UX designs. Adept at leveraging cloud computing (AWS) to enhance web performance. Strong problem-solving abilities and a keen eye for detail.

**EDUCATION**

Kwame Nkrumah University of Science and Technology (KNUST)

Degree in Computer Engineering, 2021-2024

**CERTIFICATIONS**

- Introduction to Cybersecurity tools and Cyber Attacks, 2021

- AWS Academy Cloud Foundation, 2024

- AWS Academy Data Engineering, 2024

- AWS Academy Introduction to Cloud (Semesters 1 & 2), 2024

**SKILLS**

- Programming Languages: JavaScript, React, HTML, CSS, Tailwind CSS, Python

- UI/UX Design: Adobe XD, Figma

- Web Technologies: RESTful APIs, JSON

- Cloud Computing: AWS (S3, EC2)

- Version Control: Git, GitHub

- Tools: VS Code, Chrome Developer Tools

- Soft Skills: Attention to detail, problem-solving, teamwork, communication

**EXPERIENCE**

**Frontend Developer Intern, Bolt Ghana**  
*Dwowulu Accra, Ghana | November 2021 – Current*

* Collaborated with the development team to enhance the user interface of the Bolt driver app.
* Implemented responsive design principles to improve usability across various devices.
* Utilized JavaScript and React to develop interactive features and components.
* Conducted usability testing and gathered user feedback to refine UI elements.

**Frontend Developer, Home Tuition Consult**  
*Nungua, Accra, Ghana | September 2022 - December 2022*

* Designed and developed a user-friendly web portal for students and parents using HTML, CSS, and JavaScript.
* Created dynamic forms and interactive elements to improve user engagement.
* Worked closely with the backend team to integrate APIs and ensure seamless data flow.
* Improved the website's performance and loading times through optimization techniques.

**Frontend Developer Intern, Ghana National Fire Service**  
*Osu, Accra, Ghana | October 2023 - December 2023*

* Assisted in the redesign of the Fire Service's internal portal to enhance accessibility and user experience.
* Implemented new features using React and integrated them with existing backend services.
* Worked on cross-browser compatibility issues to ensure consistent performance across different web browsers.
* Participated in code reviews and contributed to the improvement of coding standards and practices.

**PROJECTS**

**Flashy**

Frontend Developer, 2024

- Developed a cross-platform application to create flashcards from lecture slides and textbooks.

- Implemented responsive designs and optimized the user experience.

**Mobile Money Fraud Detection App**

Frontend Developer, 2024

- Built the frontend of a fraud detection system using React Native.

- Integrated NLP features to analyze and report suspicious activities.

**HOBBIES AND INTERESTS**

- Reading and coding

- UI/UX design

- Music and entertainment

**LANGUAGES**

- English, Akan (Twi, Fante), Ga

**REFERENCES**

- Mrs. Comfort Jabari: +233 244637523

- Mr. Addo-Ahwireng Maxwell: +233 243982883

Sylvester Kafui Kofi Darkey

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[credly.com](https://www.credly.com/earner/earned)

**Summary**

Skilled multitasker with a superior work ethic, strong teamwork, problem-solving, and organizational skills. Highly dedicated and reliable team player with a hardworking and resourceful approach. Eager to learn, advance computer proficiency, and contribute to industry operations. Proficient in various areas, with a solid background in both field and office settings, committed to supporting team needs. Known for a conscientious and detail-oriented approach to boosting productivity and performance.

**Experience**

 **Intern**

Ghana Rubber Estates Limited

Oct 2022 - Nov 2022 (2 months)

* Gained practical experience in the IT department.
* Contributed to various IT tasks and projects.

**Intern**

Volta River Authority

Sep 2023 - Nov 2023 (3 months)

Gained practical experience in the MIS department. Contributed to various IT tasks and projects.

Completed some research assignments on Networking terms (like DHCP, DNS, IP Addressing) and How to improve client services in the MIS department.

**Education**

 Mfantsipim School

PHYSICAL SCIENCES

2017 - 2020

 Kwame Nkrumah University of Science and Technology, Kumasi

First degree, Computer Engineering

2021 - Present

**Licenses & Certifications**

 **Introduction to Cybersecurity** -Cisco

**Network Support and Security** **-** Cisco

 **Networking Devices and Initial Configuration** - Cisco

 **Networking Basics** - Cisco

 **Network Addressing and Basic Troubleshooting** - Cisco

**Network Technician Career Path** - Cisco

 **AWS ACADEMY GRADUATE BADGE** - AWS Academy Introduction to Cloud Computing

 **AWS ACADEMY GRADUATE BADGE** - AWS Academy Foundation

 **AWS ACADEMY GRADUATE BADGE** - AWS Academy Cloud Architecting

 **AWS ACADEMY GRADUATE BADGE** - AWS Academy Cloud Security

**Skills**

Network Administration • Management • Leadership • Analytical Skills • Problem Solving • English • Teamwork • Information Technology • Computer Engineering

**References**

Available upon request

|  |
| --- |
| Emmanuel Donkor  Takoradi, P.O. Box AX1147 · +233 20 62 30111  sunnycodeengineer@gmail.com · www.linkedin.com/in/emmanuel-kofi-donkor · https://github.com/sunnyCodeENGINEER |
| Professional Summary  |  | | --- | | Skilled Senior iOS Developer with 3 years designing iOS apps to top download charts and drive revenue. Known for using innovative development techniques to create trendsetting content. Adept at rapidly onboarding junior staff and diversifying developer voices by discovering untapped talent. | |

# Experience

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| 0ctober 2022 – presentIOS Application Developer, SunnycodeengineerResearched and selected APIs for integration into development projects.Applied Apple's Swift development language to code native apps for iOS platform.  * Brainstormed new application concepts based on available development assets and historical successes. |

|  |
| --- |
| 2023 – presentFLUTTER Application Developer, SunnycodeengineerResearched and selected APIs for seamless integration into Flutter applications.Utilized Dart and Flutter framework to develop cross-platform apps for both iOS and Android.  * Brainstormed and conceptualized new Flutter application ideas based on available development assets and historical successes. * Implemented responsive and adaptive UIs in Flutter to ensure a consistent user experience across various devices. * Optimized app performance by employing Flutter's asynchronous programming and state management techniques. * Collaborated with designers to create intuitive and visually appealing user interfaces using Flutter's widget library. * Kept up-to-date with the latest Flutter updates, libraries, and best practices to continuously improve development processes. |

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| september 2024bsc. computer engineering, Kwame Nkrumah University of Science And Technology  * Completed University-level Coursework: Programming and Problem Solving, Kwame Nkrumah University of Science and Technology * Completed University-level Coursework: Object Oriented Programming, Kwame Nkrumah University of Science and Technology |
| September 2024High School Diploma, Adisadel College |

# Skills

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| * Ios Application Development * Flutter Application Development * PyQt6 Application Development (Python) * Engineering Standards * Customer Needs Assessments * Apple Human Interface Guidelines | * Customer Interaction * Scripting Languages: Python * Fluency in Swift, C, C++ * Debugging and Troubleshooting |

# Certifications

* Intro to Machine Learning Training - 2023
* Intermediate Machine Learning Training - 2023
* Data Visualization Training - 2023