

#### **UKWITEGETSE Valens**

Phone: 0780468216

Email: Ukwitegetsev9@gmail.com

Current Resident: Kigali City, Nyarugenge District

Nationality: Rwandan

LinkedIn: www.linkedin.com/in/ukwitegetse-valens-58b50125b

GitHub: <a href="https://github.com/ukvalens">https://github.com/ukvalens</a>

#### **OBJECTIVE**

A highly motivated Computer Engineering student seeking a challenging Software Development Internship to apply technical expertise and problem-solving skills in a real-world setting. Eager to contribute to innovative software solutions and further develop my programming, team collaboration, and leadership abilities.

### **EDUCATION**

## **Bachelor's Degree in Computer Engineering**

University of Rwanda, Huye Campus & Nyarugenge Campus | 2022 – Present

#### Relevant Coursework:

- Data Structures, Operating Systems, Software Engineering, Algorithms
- o Database Systems, Web Development, Computer Networks

- o Digital Communication, Microprocessors, Cloud Computing
- Artificial Intelligence & Machine Learning, IoT
- Network Security, Cryptography, Embedded Systems

### Academic Achievements:

- Dean's List for Outstanding Performance in Programming & Systems Design (2023)
- Leadership Role in the University's Computer Engineering Club (2023)

## **Advanced Secondary School (A2)**

GS GICURA | 2018 - 2021

• **Diploma**: Mathematics, Computer Science, and Economics (MCE)

## Ordinary Level (O-Level)

GS GICURA | 2015 - 2017

Ordinary Level Result Slip

# **Primary School**

GS GICURA | 2009 - 2014

• General Primary Result Slip

#### **TECHNICAL SKILLS**

## **Programming Languages**

- **Python**: Used for web development (Flask/Django), data analysis (Pandas, NumPy), and machine learning (scikit-learn).
- C & C++: Key for embedded systems, IoT, performance-critical applications, and game development.
- Java: Android mobile app development, back-end development, and enterprise applications.
- PHP: Backend web development, server-side scripting, database integration.
- JavaScript: Front-end web development, interactive user interfaces with React.js.
- HTML, CSS: Front-end design, responsive layouts, and web accessibility.

### Web Development & Databases

• **React.js**: Building dynamic user interfaces with reusable components.

- Node.js & Express: Full-stack JavaScript development for scalable web applications.
- MySQL & PostgreSQL: Relational database management systems (RDBMS), SQL queries, stored procedures.
- MongoDB: NoSQL database, used for flexible and scalable data storage.
- Firebase: Real-time database and cloud storage for web and mobile applications.

### **Cloud Computing & IoT**

- AWS: EC2 (virtual servers), S3 (storage), Lambda (serverless), CloudWatch (monitoring).
- Google Cloud Platform: Compute Engine, Firebase.
- **IoT Platforms**: Arduino, Raspberry Pi (with sensors, actuators, and automation projects).

## **Networking & Security**

- Networking: TCP/IP, DNS, DHCP, VPNs, HTTP/HTTPS.
- Security: Firewalls, encryption, network security protocols, secure coding practices.

### **CERTIFICATIONS**

Data Science Certificate – Coursera

IT Essentials Certificate – Cisco Networking Academy

Cybersecurity Certificate – University of Maryland

CCNA: Introduction to Networks Certificate – Cisco Networking Academy

AWS Certified Solutions Architect - Associate – Amazon Web Services (AWS)

Machine Learning with Python Certificate – IBM

click here to access certificates

## **WORK EXPERIENCE**

## **Computer Science Teacher**

GS GICURA | Since 2021

- Developed lesson plans on basic programming, algorithms, and digital literacy.
- Conducted hands-on coding sessions and guided students through coding challenges.

• Collaborated with the school to design curriculum for computer science subjects.

### **Freelance Software Developer**

Self-Employed | 2022 – Present

- Developed several full-stack web applications, mobile apps, and database systems.
- Projects:
  - Mobile App for Elderly Users: Designed user-friendly mobile applications focused on accessibility and navigation for elderly individuals.
  - Healthcare Management System: Built a web-based application to manage patient records, appointments, and medical history using MySQL, PHP, and JavaScript.
  - E-Commerce Platform: Created a dynamic and responsive e-commerce website with integrated payment gateway and order tracking system.

### **PROJECTS (DETAILED)**

## **Mobile Application for Elderly Users**

- **Overview**: A mobile app designed to assist elderly users with navigation, daily reminders, and emergency assistance.
- Technologies Used: Java (Android), Firebase (for user authentication), Android Studio.
- Challenges: Ensuring ease of use with minimal user interaction.
- Outcome: Positive feedback from initial testers, focusing on usability.

## Web-Based Healthcare Management System

- **Overview**: A platform for managing healthcare records, appointments, billing, and medical histories.
- **Technologies Used**: HTML, CSS, JavaScript, MySQL, PHP, Bootstrap.
- Challenges: Ensuring secure handling of sensitive health data.
- Outcome: System scaled successfully for small clinics with data encryption for security.

### **E-Commerce Platform**

- Overview: A complete e-commerce site with product management, shopping cart, and order processing.
- **Technologies Used**: PHP, MySQL, JavaScript (AJAX), HTML, CSS, Bootstrap.
- Challenges: Managing user data securely and integrating with external payment services.
- Outcome: Improved online shopping experience with enhanced security features.

#### RESEARCH AND REPORTS

# Research Project: Enhancing Access to Real-Time Service Information in Kigali

- Objective: To investigate how technology can improve access to public service data in Kigali.
- Findings: Identified gaps in real-time service delivery and proposed a mobile app solution.
- Impact: Contributed to discussions with local authorities about potential smart city solutions.

### **PERSONAL SKILLS**

#### Leadership

 Demonstrated leadership in group projects and university clubs, including organizing coding boot camps and seminars.

#### **Teamwork**

• Collaborated with teams on diverse projects, ensuring efficient communication and a collective approach to problem-solving.

# **Problem-Solving**

• Strong analytical skills, applied in debugging and optimizing code in complex systems and applications.

## **Time Management**

• Balanced multiple academic, freelance, and extracurricular activities while maintaining excellent performance.

# Communication

• Clear communication skills, both verbal and written, with experience in presenting technical topics to non-technical audiences.

#### **HOBBIES AND INTERESTS**

- **Reading**: Continually exploring new topics related to technology, entrepreneurship, and software development.
- **Research & Learning**: Constantly learning new programming languages, frameworks, and technologies (e.g., cloud services, machine learning).
- **Programming Projects**: Always experimenting with new coding challenges and participating in hackathons.
- **Sports**: Football and volleyball, often participating in university team events.
- **Music**: Passionate about listening to various genres, focusing on how music production integrates with technology.

#### **REFERENCES**

### 1. UWIMBABAZI Jurdas

Headteacher, GS GICURA Phone: 0788656553

### 2. Dr. DUKUNDIGENA Emmanuel

Medical Doctor, RUHENGERI Health Center

Phone: 0782564501

## 3. Alexander NGENZI

Lecture and Head of Department, University of Rwanda

Email: alexandrengenzi@gmail.com

## Declaration

I hereby declare that the information provided in this resume is accurate and true to the best of my knowledge.

Signed: UKWITEGETSE Valens