Sarah Agemo

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Professional Summary:

As a proficient Software Developer, I bring extensive experience in designing, developing, and maintaining software applications, with a robust foundation in both front-end and back-end systems. Over the past twelve months, I have been actively engaged in real-world projects, applying advanced skills acquired through comprehensive training, mentorship, and hands-on experience. My expertise in addressing complex issues with efficient solutions, coupled with a commitment to continuous learning and staying abreast of industry trends, ensures the delivery of high-quality results. My meticulous attention to detail, effective problem-solving abilities, and collaborative approach, along with strong communication skills, make me a valuable asset to any development team. My ongoing focus on research and teamwork further enhances my professional growth and contributions.

Technical Skills:

- Database & Data Processing:
 - o SQL (Basic)
 - Postgres
 - Database Management
- Development Tools & Platforms:
 - Visual Studio
 - o Git & GitHub
 - o CI/CD
- Programming & Frameworks:
 - Python Object-Oriented Development
 - JavaScript
 - Nest JS
 - React JS
 - Django Templating Language
- Web Technologies:
 - o HTML, CSS & Bootstrap
- Other Technical Skills:
 - o Application & Software Security
 - o Data Structures & Algorithms

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Soft Skills:

- Effective Communication
- Attention to detail
- Project Management
- Critical thinking & problem solving
- Leadership & team building
- Collaboration
- Adaptability
- Quick learning

Experience

Internship: Clarke International University (CIU) - Online Exam Monitoring System (Sept 2024 - Dec 2024)

Project Overview: I'm currently developing a comprehensive, low-bandwidth online examination monitoring solution to enhance the integrity of remote exams. The system addresses common issues like cheating, unauthorized resource access, and disruptions due to power outages or connectivity issues. Integrated advanced proctoring features, real-time monitoring, and seamless compatibility with university platforms (Moodle, MIS).

Key Contributions:

- Frontend/Backend Developer: Led development of both frontend and backend systems, using React JS for the user interface and Nest JS for the server-side logic.
- Implemented **safe browser** functionality to prevent switching between applications and unauthorized resource access during exams.
- Designed and integrated **random image and voice capture** for real-time proctoring, optimized for low bandwidth.
- Developed features for **handling exam disruptions**, including session resumption, auto-submission, and exam timing management.
- Worked on **database architecture** using **Prisma and Postgres** to manage exam data, logs, and analytics.
- Integrated **Single Sign-On (SSO)** for streamlined user authentication and improved security.
- Ensured seamless integration with university platforms like **Moodle** and the **Management Information System (MIS)**.

Technologies Used:

Frontend: React JSBackend: Nest JS

• Database: Prisma, Postgres

• Other Tools: SSO, Real-time monitoring/logging

Projects

Daycare Management System (Feb 2024 - May 2024)

Developed a web application to streamline daycare operations, including baby and babysitter

check-ins/outs, inventory management, service scheduling, and payments. The system also generates transaction receipts for transparency and automation.

Technologies used:

- Python
- Django
- HTML
- CSS

Self-Directed Learning Project (May 2024 to date)

- Expanding database management skills through hands-on practice with SQL and SSIS
- Developing familiarity with Microsoft Azure cloud services and Visual Studio development environment
- Creating and modifying database views and stored procedures to better understand data flow and manipulation"

Personal Blogging Website (January 2024)

Created a personal website to document my journey, aspirations, and interests. I designed a visually appealing and user-friendly platform.

Technologies used:

- HTML
- CSS
- Bootstrap5

Portfolio Website (June 2024)

Built a comprehensive personal portfolio website showcasing my projects, experience, and language proficiencies. This provides a detailed overview of my skills and achievements.

Technologies used:

- JavaScript
- HTML
- CSS
- Bootstrap5

Education

Advanced Certificate in Software Engineering

Refactory Academy June 2024 - December 2024

Certificate in Python Development

Refactory Academy January 2024 - May 2024

Uganda Advanced Certificate of Education

Iganga Secondary School 2018 - 2019

Uganda Certificate of Education

St. Michael International School 2014 - 2017

Awards

Certificate in Software Engineering

Refactory Academy

June 2024

Awarded upon completion of a rigorous three-month program encompassing both technical and non-technical training.

Certificate of Appreciation, Women in Fintech Hackathon

Hipipo, Include Everyone Organization

August 2023

Recognized for participation in a hackathon aimed at developing technological solutions for local financial sectors.

Languages

- English
- Ateso

References

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