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EXPERIENCE

Cyber Security Intern

June 2023 -present

Currently working at a private cyber security company, where I am involved in regular day-to-day work, which involves pentesting different client's mobile and web applications using different tools.

Here is a detailed outline of the activities I am tasked to do:

- Getting a mobile application, extracting it's .apk file and first running it through static analysis.
- I accomplish static analysis via different tools but mostly using MobSF, which I find is a comprehensive tool for performing such an analysis.
- I read through the application report and understand the overall scope of how secure or insecure it is.
- Often, I am tasked with writing scripts using Python to automate certain processes. I wrote a script that automates the scanning processes of the MobSF framework and gives you a comprehensive overview of the mid, high, and extreme points of weakness of an application. Without reading through the report, you immediately get to know how the app performs on the security scale. The script uses the MobSF scan API and is available on my GitHub.
- Lastly, there is the task of performing dynamic analysis of an application using genymotion.

Afterward, I am required to forward my different findings of a particular app to the right person who then communicates directly with the client.

Other list of tools I have used in this position:

- SQLmap.
- ZAP.
- OpenDoor (web app scanner).

I have been working in my current role for the last 5 months now.

SKILLS and Experience

- React
- Tailwind CSS
- JQuery
- Data structures
- Sorting algorithms.
- Linux
- Bash scripting
- Python
- JavaScript
- SQL
- HTML
- CSS
- Quick learner
- Problem-solving
- Test-driven development (unit tests and doctests)
- Effective communicator - speech and written text
- Effective planner
- Cooperative and happy to work with others on team projects

AWARDS

- **C programming language badge (ALX)**
- **Python programming language badge (ALX)**
- **SQL completion badge.**

Content/SEO/Technical Writing

November 2014 - November 2022

Before getting into tech, in University, and immediately after graduation, I delved into writing having realized it was a lucrative field, which I was exceptional at. I:

- Started with SEO and content writing for iWriter which was an online company with a free membership to interested and hardworking writers and paid by the words one wrote.
- Changed positions to a Saudi-based company under the name Edarabia, that was also in the content creation business that paid better compared to iWriter.
- Eventually settled for academic writing, which was my longest record in the writing industry having worked as a writer then later as a manager overseeing other writers in a private company.

In general, I spent about 8 years as a professional writer. In all cases, researching, writing, and prompt delivery of work was a major requirement, which instilled a serious sense of timeliness, planning and punctuality in every task I undertake.

Tea Processing Factory(KTDA led), Kiambu, Kenya — *Assistant Electrical Engineer*

January 2017 - March 2017

Briefly worked as an assistant Electrical Engineer at a KTDA led tea processing company. As an assistant Electrical and Control engineer:

- I was tasked with the maintenance of Electrical equipment in the factory, mainly 3-phase motors and 3-phase transformers and the accompanying control circuitry.
- I was tasked with the direct supervision of the various conveyor belt systems that represented the different processing areas of the factory.
- I installed new electrical equipment and casual wiring of minor home and office equipment completely under self-supervision.
- I directly handled different electrical-related issues in the factory from the factory personnel and fulfilled all requests in a satisfactory manner.
- Lastly, I was tasked with ensuring the safety and security of the workshop.

This was a 3 month experience expedition.

EDUCATION

ALX Africa — *Full Stack Developer*

November 2022 - present

Currently, in ongoing training at ALX Africa - a foundation designed to

- JavaScript, Responsive Web Design, React,and jQuery at ALX
- Various certifications in Mathematics.
- Cisco Networking Academy certification/badge in the Intro to CyberSecurity, Intro to Data Science, Python Essentials, and Networking Essentials.
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LANGUAGES

English

Swahili

REFEREES

1

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3

Name: James Yuri

increase the pool of Full-Stack software engineers and programmers in the African continent. At ALX, I have redefined my appetite to build useful products in the same way Electrical and Control Engineering does in enforcing my curiosity and capacity to take things apart, fix them, and put them back together again. At ALX:

- I delved into low level programming, particularly in the C programming language.
- I completed basic projects in C including final projects in re-inventing the printf function in C and re-inventing the basic shell in C, which was no easy feat. Both projects can be found in my GitHub.
- I gained an appeal to high level languages after successfully completing C, particularly JavaScript and Python.
- I learned scripting in Python and functional programming, both of which I am proficient in, having completed such tasks as the N-queens problem among numerous others.
- Coming from C and into high level languages, I delved into data structures and algorithms, including gaining an understanding of which searching and sorting algorithms are efficient from their time complexity. This is also something I am good at.
- Going into JavaScript made me understand its essence as a programming language of the frontend powering all web browsers.
- Adding to my knowledge of JavaScript, I gained proficiency in jQuery, React, and Expressjs.
- I have completed different projects in HTML5 and CSS, and completed all requirements of responsive web design with a mobile-first approach when designing and building applications.
- I have satisfied all requirements pertaining to backend development and DevOps as well, having delved into the use of Flask, working with Nginx, and deployed an AirBnB website that we developed in two different servers, including hosting a load balancer server between them.
- Delved into DevOps and system design.

Egerton University, Nakuru, Kenya — *Bsc. Electrical and Control Engineering*

November 2012 - November 2017

- Studied Electrical and control engineering to gain knowledge and relevant skills in electrical, control, and power systems.
- In the process, an introduction and an emphasis on programming in the field was outlined.
- Gained an understanding of power systems, system processes, and three phase machines.
- Delved into concepts of hydraulics and water engineering, machine work, mechanical engineering, material science and control and automation using relevant industrial software.

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Baricho Boys High School — *High School Education*

January 2008 - November 2011

- Completed High School education with a B+.
- Developed an outstanding performance in mathematics and sciences.

Portfolio Project — *created a webservice using an API*

A collaborative project with two cohort members using Python, JavaScript, html, CSS, and Flask to create routes to serve keyword driven health articles.

- Worked on the API logic/code to retrieve and parse the retrieved health articles using Python.
- Integrated the API logic with the Flask route code that displayed the articles relevant to a user submitted keyword.
- Created the frontend logic that generated a unique user id used to log in and sign up users into the system using JavaScript.
- Assisted in debugging the backend logic that was implemented using SQLAlchemy.

Airbnb Clone project — *created a working clone of an Airbnb website*

The project was a collaborative effort with a fellow ALX student completed and saved on GitHub.

- The first task of the project was to create the Console, an interpreter that manipulates classes like the User, Place, City, Reviews, etc.
- In addition, the project entailed creating a base model in Python OOP (Object Oriented Programming), which was the superclass with key attributes.
- First created static web pages using HTML5 and CSS, then later added dynamic features using JavaScript. This part of the project was accomplished individually.
- Deployed the final project on two nginx servers supported by a load balancer using Haproxy.
- All the DevOps tasks in between were completed individually as well, including the deploying stage.
- Individually performed Haproxy and Nginx configurations to meet the expected requirements.

Sorting algorithms projects — completed different sorting algorithms and analyzed their time and space complexity

- Deep understanding of various sorting algorithms: **bubble sort, insertion sort, selection sort, quick sort.**

- I can recreate the same in other languages, like Python and JavaScript.

Data Structures projects — completed an array of data structure projects in C, Python, and JavaScript

- Great understanding of various data structures in C - **arrays, singly linked lists, doubly linked lists, stacks, queues, binary trees, hash tables, etc, in Python - lists, tuples, sets, dictionaries,** etc.

Basic C Printf Project — *created a printf project in C to appreciate the language's many functions*

- Recreated the C version of the printf function from scratch to show my understanding of low level concepts.
- Available on GitHub.

Simple Shell Project in C — *created a simple shell in C language to emulate a UNIX-like shell*

- Recreated the shell to show an understanding of low level concepts.
- Also available on GitHub..