# MAIRO PAUL RUFUS

### **Computer Science Engineer**

@ contact@rmpr.xyz

**\** +237690823108

% rmpr.xyz

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### **EXPERIENCE**

### **Devops Intern**

### **Digital House International**

February 2020 - July 2020 P Douala, Cameroon

- Built a CI/CD pipeline for the main product of the company
- Improved deployment time from 2 hours to a couple of minutes by using containers (Docker, Podman) and Bash scripts
- Reduced the number of merge conflicts by setting up a Jenkins server on top of the GitFlow branching model.
- Detected an undersized server before deploying to production while assessing capacity planning, avoiding a potential crash
- Managed some hosted services on AWS (Amazon EC2)

# Google Summer of Code Student

#### Samba

May 2019 - August 2019

- Remote, USA
- Worked on improving smbcmp the capture diff tool used to diagnose SMB protocol issues
- Improved diffs visualization by using the PDML output instead of the plain text output of Wireshark making them more human-readable
- Made the program more modular by adding ways to let users add ignore rules for packets
- Designed and implemented a GUI with wxPython, ported the software to Windows and documented the process to make on-boarding of new contributors easier

### Web Developer Intern

### **Technipedia**

## June 2018 - August 2018

- **♀** Yaounde, Cameroon
- Implemented Cosine-similarity algorithm for item-based collaborative filtering to make quick recommendations with Python and Numpy
- Redesigned and implemented the UI of the company's website, adopting the material design guidelines to improve the UX using Django and Material Design for Bootstrap

### Al Family Challenge Coach

#### Cavsti

- Implemented a linear regression model to classify objects in two classes named by the user, for the children and their families to train and solve a problem around them
- Organized AI lessons with provided educative material

# **ACHIEVEMENTS**

- Top 0.05% Stack Overflow user in Cameroon
- · Quora top writer
- Among the first 70,000 Hacktoberfest 2019 prize recipients
- Google Mobile Web Specialist Certification
- A Beginner's Guide to Linux Kernel Development Certification

# **EDUCATION**

### Master's Degree, CSE

### **National Advanced School of Engineering** of Yaounde

September 2015 - October 2020

- Graduated with High Honours
- Coursework: Algorithms, Operating Systems, Al, Computer Networks, Databases, System Programming, Web Programming
- Acceptance rate: 3.6% (180 selected over 5000+ applicants)

# **PROJECTS**

### Atbswp - Macro recorder

- Developed a multi-platform app that allows users to record their mouse and keyboard actions and reproduce them identically as many times as they want.
- Improved soft skills by creating and managing a community of 50+ members around the tool.
- Engaged users worldwide by adding internationalization and Open Source Advertising
- Set up a matrix workflow with Github actions that simultaneously test across multiple versions of Python

### Molux - Web app

- Co-developed an online multiplayer game where each player tries to form the largest number of words using the letters provided
- Worked with NodeJS and Mongo DB for the back-end to store and retrieve various data

### Psh - Basic Unix Shell

- Developed a basic working shell in C to understand how things work under the hood
- Experimented with Readme Driven Development

### **Voltaire - Telegram bot**

- Developed a self-hosted Whatsapp-Telegram bridge in Python to enable full-duplex communication between two groups, one each platform
- · Improved exception handling skills and debugging skills by working with various APIs and Python modules.

## **SKILLS**

Languages: Bash, C, Java, JS, Python, Rust

Databases: MySQL, MariaDB

Frameworks: Django, Flask, wxPython Tools: Git, GDB, Ansible, Linux, Nginx