Ramses A.

Software Engineer

✉ Montreal, Quebec
Permanent Resident of Canada

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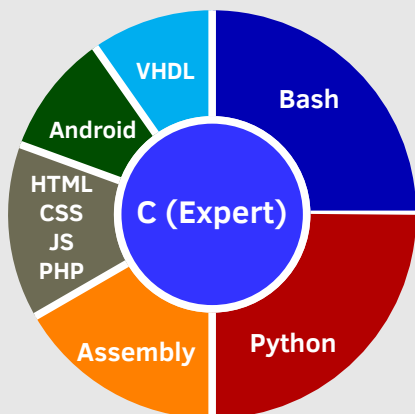🌐 ramses.ca

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About me

I am a Computer Engineer specialized in Network Systems, Low-Level Programming, Embedded Systems, and Computer Architecture. I am a Permanent Resident of Canada, and I can travel abroad if needed.

Top Skills

Linux Kernel ★★★★★
x86, x64, arm64, AVR, PIC ★★★★★
TCP/IP Networks ★★★★★
Altera/Xilinx FPGAs ★★★★★
Windows Kernel API ★★★☆☆

My Programming Chart

Spoken Languages

English (*Preferred*)

French (*Learning*)

Italian (*Basic*)

Hieroglyphs (*Hobbyist*)

Education

2011 - 2016   **B.Sc., Computer and Systems Engineering**   Alexandria University
Rank: 1st (highest GPA)
GPA: 3.94/4.00
Graduation Project: **FPGA** computer based on **MIPS** architecture

Experience

Current   **Software Engineer at Cisco, Ottawa**

My team works on a number of crucial features for **Cisco 8000 Series**, **NCS5000 Series**, and **ASR9K Family** to satisfy Service Provider market needs. I also contributed to **Cisco Catalyst** and **Nexus 9000**. My daily tasks included:

1. Implementing new components for **Cisco's IOS/XR**, **IOS/XE**, and **NXOS** Operating Systems in C.
2. **Designing and deploying** new **testbeds** and laying out new racks in our internal **data centres and labs**.
3. Utilizing my **Linux Expertise** to administer the data centre.
4. Developing a decent **automation** platform to assist my team with automating integration testing (**bash/python**).
5. Enhancing our use of **virtualization technologies**, including **vSphere**, **KVM**, etc.
6. **Troubleshooting** network problems and fixing failed routers.
7. Writing **Documentation** and Specifications for my work.
8. **Training** new hires and interns on Networking/OS basics and Cisco products.

2018   **Software Engineer at SoundHound, Toronto**

Working with a team of top-notch AI engineers on high-end Speech Recognition and Natural Language Processing products. Some of the job responsibilities included:

1. Leveraging my **C/C++** programming skills to develop server-side **NLP** modules.
2. Provide **Linux** technical expertise to the automation of various processes.
3. Manipulating and managing large database systems.

2017   **Researcher (Networks) at Simon Fraser University, Vancouver**

Implementation of an LTE base station using *Ettus B210* **USRP** (**Software-Defined Networking**) and *OpenAirInterface*.

2015   **RA Intern (Networks) at SmartCI Research Center, Alexandria**

Programming the storage system of a cognitive radio cloud, which consisted of Linux nodes with **ext2fs**, using **IP multicast** and **filesystem-aware data compression**.

Selected Projects

- Network system for OS image distribution over **cloud network** using Frisbee.
- Radio KAOS: **Cognitive Radio Network** with Dynamic Spectrum Sharing.
- CDP: **Linux kernel driver** implementation for a reliable Data Transfer Protocol.
- Quafios: An **Operating System** for x86 and MIPS.
- Designed a Linux kernel device driver and synchronization assignment for OS course at Alexandria University.
- Technical Report on Unified Extensible Firmware Interface (**UEFI**).