

Ramses A.

Computer and Systems Engineer

Ottawa, Canada
Willing to relocate if needed

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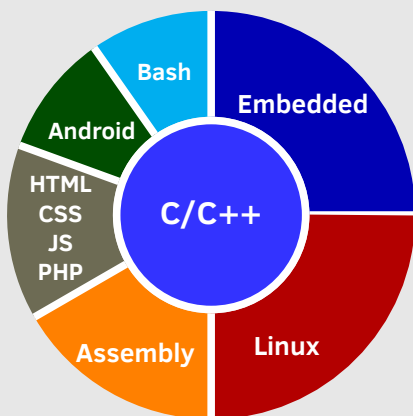
<https://github.com/iocoder>

[linkedin.com/in/mabdelaz](https://www.linkedin.com/in/mabdelaz)

About me

Computer software engineer with wide technical expertise in computer networks, low-level programming, embedded systems, database systems, and computer architecture.

Technologies



OS

GNU/Linux ★★★★★
FreeBSD ★★★★★
Windows ★★★★★

Languages

English (Very Fluent)

IELTS: 7.5 — CLB: 8

Arabic (Native)

Italian (Beginner)

Education

2011 - 2016 B.Sc., Computer and Systems Engineering

Alexandria University

Rank: Valedictorian

GPA: 3.94/4.00

WES Evaluation: Completed on March 2nd, 2018

Graduation Project: [FPGA computer based on MIPS architecture](#)

Experience

Current **Software Engineer at Cisco Systems, Ottawa**

My team works on a number of crucial components of **Cisco's operating systems** designed to run and control high-end routers and switches which are deployed in data centers and network labs worldwide. The role leverages my **low-level programming talent** and **system software experience** to develop low-level software and firmware for Cisco's products. This includes:

1. Developing new features and implementing new components for **one of the core routing protocols** that drive the Internet.
2. Enhancing our use of **virtualization technologies** and developing new programs and tools to automate simulations.
3. Improving the **lab equipment** and bringing up new testbeds to increase the productivity of the team.
4. Utilizing my **UNIX expertise (GNU/Linux and FreeBSD)** to employ a fully-automated development environment for the team.
5. Training new hires on networking/OS basics and Cisco products.

2018 **Software Engineer at SoundHound, Toronto**

Mainly working 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 databases and information systems.

2017 **Research Assistant at Simon Fraser University, Vancouver**

Implementation of an LTE base station using **Ettus B210 USRP** and **OpenAirInterface**.

2017 **Control Systems Engineer at Advanced HVAC Consultant, Cairo**

Implementation of feedback control loops for **HVAC** systems using **Fupla** (function block diagrams) on **Saia Burgess PLC** devices.

2016 **Software Engineer at Ejada Systems, Alexandria**

Providing enterprise solutions to banks in the Middle East, including:

1. Implementation of **CRM** systems using **Oracle Siebel**.
2. Developing **BigData** solutions using **Hadoop** and **Scala**.

2015 **RA Intern 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

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