Since the countdown for the summer pasture has started, I assume that it is time to get focused on most important stuff that would definitely lay the ground for a promising professional career, to begin with, and from there on to keep moving ahead with new discoveries in an open-ended IT world. The aim is to rise up to most, if not all, the upcoming challenges and to prove one’s ability to meet and to adapt to the very selective needs of nowadays and tomorrow’s labour market.

As far as I am concerned, I firmly believe that starting from basics is a MUST and a prerequisite for anyone who has made the decision to embark on the IT industry. This of course does not mean that, personally, I ignore about those basics, but I do have the utmost convenience that knowing from where to start is the first good step to know where we want to go. Skipping steps is definitely not what I want to do since, even though I will acquire interesting theoretical and professional background in a precise IT branch, I will carry on the feeling of missing small but useful details for the rest of my career. Of course, it is never too late to get back and read about and practice on those small details, but it is always preferred to start doing things the right way and keep moving ahead while not being constantly haunted by the bad feeling of missing ESSENTIALS.

For my PROFESSIONAL JOURNEY, I am more likely to start as **Systems & Networks Admin/Engineer** while simultaneously digging towards **Security Specialist & Ethical Hacker**.

This said, and after reasoning with myself, I have decided for tackling my summer pasture to go through the following steps:

1. **WINDOWS AND LINUX SYSTEMS ADMINISTRATION:**

* Discovering systems’ architectures (Windows 10, Ubuntu and Kali, notably)
* Discovering systems’ services
* Gaining a thorough knowledge about hardware
* Intensive readings and practice on both BASH and POWERSHELL.
* Gaining more familiarity with COMMANDS on terminals
* Practicing more on Monitoring and on the tools used for this task
* Learning and practicing more on Automation for systems and networks administration

The objective of this first step is simply to get COMPREHENSIVE hands on the most commonly used Operating Systems, for this familiarity will definitely bring more confidence in oneself regarding the use, the monitoring, the healthy administration and of these OSs and the techniques for securing them properly.

1. **NETWORKING:**

Since System Administration and Network Administration are intimately/inextricably interlinked, it is then unavoidable and extremely important to know the basics about networking. For this, I have already started reading and summarizing a CCNA book and I have got a book with interesting labs for practicing and getting familiar with Cisco’s IOS and all networking stuff. I also have got access to online trainings on Udemy and StationX.

The objective is to get acclimatized to IP addressing, to the different networking protocols, to network topologies, to the configuration of network hardware, to better understand and use subnetting and to discover the best practices for monitoring and securing networks.

The forecoming objective is to prepare for my CCNA certification.

1. **DEVOPS:**

I am keen to spend some time working on Docker, Vagrant, Kubernetes, Ansible and Terraform. These tools are highly recommended for anyone who wants to dive into DevSecOps. Thus, I will not be the exception and I know that GitHub offers a wide range of possibilities/repos, including virtual labs, that allow newbies to get used to these tools. I also have got access to interesting visual trainings by “Nana” that have been of great help so far.

The objective is to gain strong familiarity with the most commonly used tools in the field of DevOps and to discover the different techniques used to secure software/application development. This is not the limit, since I equally aim to be at ease with using the files (Dockerfile, Vagranfile…) and scripts (playbook) allowing automated deployment and provisioning.

1. **AZURE AND AWS:**

There is no getting around the fact that cloud services are taking over and that more and more companies, regardless of their sizes, are migrating or planning their migration to the cloud. The challenges about Azure in the training allowed me to discover practically and from a close distance what a cloud service is about and how to use it. Nowadays labour market IMPOSES the reality that the coming years’ hegemony is definitely the Cloud’s for reasons such as companies control over their own budgets and data security.

The objective for me is to cope up with the labour market’s needs, first and foremost, but also to get used to the good practices of cloud usage, including application deployment in a more secure way and environment. I have done some readings on Azure and practice is available online with Microsoft.

1. **SECURITY:**

This is actually the issue that haunts all IT practitioners. As I said earlier, security comes first from a good understanding and mastery of systems and networks; of an infrastructure in general. One cannot expect a first better security practice other than a system and a network that are well secured from the inside. This practice could avoid lots of troubles to any facility if well done. However, in most cases, this remains far less than enough as recommended cyber hygiene practices are only the first shield among many others to keep a facility or a business out of a security breach or a cyber attack; at least not to suffer serious damage.

My objective here is to work on my CompTia Security+ certification for which I have already got all the necessary stuff via Udemy and StationX. There are both written and visual material in addition to practice labs.

1. **CODING:**

My center of focus here is Python. This Interpreted language has set itself apart as it is world widely used and for a variety of different tasks. I have access to all the necessary stuff for both theory and practice.

I have two objectives here: 1) learn to use Python for automation tasks, and 2) learn to hack by using Python.

These are the six major points I’ll try to keep working on during my summer pasture. Time allocated to each point will be highly considered. I don’t plan to work on many at once. ***For example***, Linux and Windows SysAdmin stuff will be allocated 10 days between theory and practice. I mean that this period will be exclusively for System Administration.