I decided to look for testimonials from professionals who do the job I plan to do in the future. In order to have an outside opinion.

#### First interview



Software development engineer hired at AViSTO

#### **Ouestion about the missions:**

## Can you tell us about your job as a software engineer?

I mainly develop in .net/C#, both on the web and for desktop apps. Today, I am working on an application to automate a number of simulations in the industrial field; I find the low level side that I had approached during my training. During my previous project, I participated in the development of a workload forecasting application to manage human resources.

# What do you particularly like about your job as a software developer?

I really like the variety of topics covered. IT is a support for many other activities, I like not being tied to a single purpose, being able to change as I go along. Then, I like computing itself, its creative side: starting from scratch, developing an app, seeing it evolve.

# What made you want to do this job?

It goes back to my first programmable calculator in high school. I got into the game and in self-study, I learned PHP, JavaScript and a little C. I also participated in scientific summer camps: half the time, we discussed science; the other half we had leisure activities.

Link of the interview

#### **Second interview**



Sullivan Richard

## Can you describe your background?

sullivan: I followed the DIIAGE from 2015 to 2017, then I met a company that trusted me to carry out a project to take to CES in Las Vegas in 2019; Following this experience, I was poached in Switzerland in a company that distributes an EDM (Electronic Document Management) around Microsoft technologies.

#### And this experience at CES?

sullivan: CES 2019 was a goal for my company on relatively short notice. From the end of October, we all together decided to carry out a project on sound listening for January, in the long term we wanted a super autonomous sensor. But given the deadlines, we decided to carry out one of the key features of the project: sound monitoring by Artificial Intelligence. The latter had to be able to analyze all kinds of sounds in real time over a distance of 400 meters and, thanks to Artificial Intelligence, classify them if the noise was a dangerous sound for civilians (firearm for example) .... So we designed an application system capable of interacting with citizens by informing them through a mobile application, but also by directly controlling the video surveillance system in order to focus the target with the "eyes". This project really allowed me to surpass myself! We were a very small team for the technique and I intervened as technical referent in all the spheres of the project: in the assembly, in the deployment, in the architecture and in the interconnection and the exploitation of the intelligence artificial. In particular, I was able to learn a lot about the sounds and noises of our daily lives, how to interact with a microphone. The website is closed and the project in France is struggling to take off due to French regulations. But in the United States we have had great success.

#### What would you say about your job today?

Sullivan: I am currently passionate about my job because I have great freedom in technological choices and a strong involvement in the DevOps link in all spheres. I am in charge of developing the new face of my company for tomorrow so I propose technologies, architectures but also future solutions such as Azure, .Net Core or even REACT based on the exploitation of DLL provided by the GED distributor who is a Microsoft partner.

# What will happen tomorrow?

Sullivan: The profession is constantly reinventing itself! Even if we can imagine in 50 years to do without developers, the margin of progress is still enormous! And in view of the new face that I bring to my current company, I hope to become a reference for her, and so she could rely on the solutions for the future that I propose... I like traveling and discovering new cultures, on entering Switzerland, I was also poached in the United States in the state of Colorado in Denver, which allows me to consider new opportunities in distant lands.

Link of the interview

#### Third interview



Aurelie

## What educational and professional background did you follow?

I graduated from the University Claude Bernard Lyon 1. I followed a master 1 in electronics, industrial computing and instrumentation. As the second year could not be done on a work-study program, I chose a master 2 specialized in efficient energy management.

# Can you tell us about your job as a software development engineer?

I mainly develop drivers in C. I integrate calculation algorithms to facilitate their porting to different targets, which can be microcontrollers, FPGAs or DSPs.

The algorithms in question make it possible to recover data from sensors, mainly accelerometers, gyroscopes and magnetometers.

The data is then used for pedestrian orientation or motion detection applications.

## What do you particularly like about your job as a software development engineer?

The variety of developments. The base remains the same, but each time I rediscover a different architecture because each microcontroller has its specificities. And then, at the end, you realize that what you did works, there is the satisfaction of seeing the result.

# What made you want to do this job?

It built up over time. I met people working in medical electronics, which interested me. I then discovered electronics at a more "technological" level. As I did not particularly like welding, having a very manual activity, I turned to computer programming. But not high-level programming behind a PC. There is always a link with electronics, cards for example.

Link of the interview