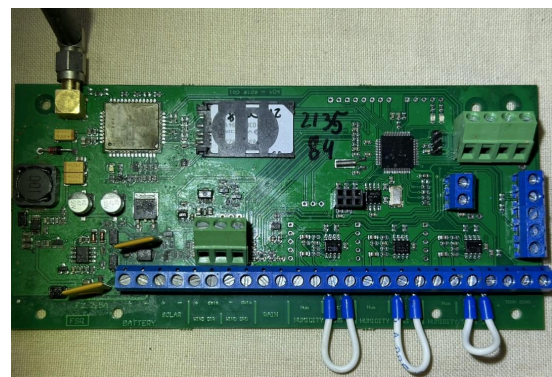


National Branch Chamber "Fruits and Vegetables" is one of the biggest professional organizations for producers in agriculture in Bulgaria, and it presents the challenges they face and the needs they have to the governance of the country. In doing so, they fight for better conditions in a sector that is considered as key to the country, yet that is currently under the severe stress of the uncertain and challenging times we live in.

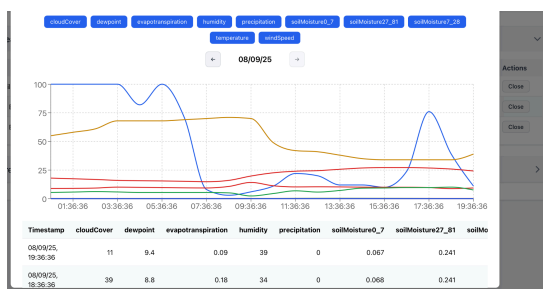


To respond to such a stress, it is a global trend for the sector to modernize and make use of modern technologies to record the different processes that take place in it and to enable the taking of more informed decisions in a much easier way for bigger and smaller producers alike. Having spotted that need, the Chamber and I started an exciting initiative, in which I was to start and lead a project, aimed to initiate a movement towards modernization in the sector of Bulgarian agriculture at a larger scale.



Our immediate goal was to start reliably capturing and storing data from various on-field sensors. Having those foundations laid down, they could then start thinking of the various ways we can build on them--allowing producers to get notified when different conditions are met, interpreting the results and giving advice or insight on what is happening in the field, given the type of production grown; the possibilities are many.

So, over the past months, I have been working on a platform, which is to respond to those needs and am appreciative and grateful to the Chamber for entrusting me and giving me a high degree of freedom.



However, just saying that hides quite a bit of the actual complexity of the project. In fact, to tackle such an endeavour, I had an important period of preparation, which started months before I actually went on-site. That preparation phase

consisted of me translating the high-level requirements I was given to a list of more detailed functional and technical requirements.

For that, I first read about similar solutions, enquired on the way they have been implemented, reading about the technical solutions used, and finally decided on the ones I was going to use. Next came thinking of the way the platform itself was to be structured, what its central elements were and how I was to write the actual code behind them.

I was warmly welcomed by the team in Bulgaria. By that time, I had already laid down the groundwork for the platform, but I still had some work on it before I could start integrating physical sensors the way I wanted to.

I finished up the current platform "stage" I had assigned to myself, and started looking towards the next one. That is where I hit my first important setback--the programming architecture I had designed was too limiting to allow for a "nice" sensor integration. I had to take a step back and go to the drawing board again. Remaining calm while doing that did not come as a first reaction to me, as having such an unexpected turn on-site was stressful. However, I managed to remain calm and patient and am thankful to the team for trusting me and being patient as well.

While working on the program, I also helped with the installation of various systems on-site. My program being more oriented towards software and theory in general, I found the physical, practical side of the project fascinating--how do you actually install machinery on-site? What are the precautions, expenses you need to foresee, what are the types of setbacks there? I gladly embraced the physicality of the installation part of the work, as it greatly helped me deal with any background stress I was going through, all the while getting an impressive tan.

Of course, my work consisted of working with people--I was constantly communicating with workers in agriculture--inquiring about the state of development of some installation or whether a sensor batch has arrived, but also talking with the agronomists and field workers about the work they do and sharing what will be coming as technical improvements. Being a Bulgarian, I did not expect to have significant issues on that front. However, I was surprised to



see that the time I had spent living abroad up to that point had been enough for me to unnoticeably to myself start losing my style and expression in my mother tongue--I found myself battling to recall a well known words or expressions, knowing the overall shape they take, but not exactly, mispronouncing, inventing, appropriating from other languages. That made communicating with people a bit harder and sometimes funny, but I kept working on my Bulgarian, and it started improving.

Looking back, I'm pleased with the fruits from my work--I have handed a platform with robust foundations, including use of technology and architecture and have, I hope, "stirred" a bit the atmosphere around Bulgarian agriculture--hopefully w. While it can already be used to provide value, I hope that the real work on it has only just started. Storing various sensor data would now be much easier for Bulgarian producers, but what excites me the most is the work that can be done on it to provide insight, analyse trends, automate processes.

Throughout the project, I took some tough decisions, had to be patient, dealt with difficulties and setbacks. However, only that could have brought me the skills and insight both about myself and the world that it has. *I saw yet again just how important people are in my life--they can turn ideas into reality, it is them that stay as warm memories about a period of one's life, it is by people, through people and for people that life's meaning, at least for myself, is synthesized.*

Working on applied projects is what makes me "click," and I am immensely thankful to EPFL and the Laidlaw foundation for providing me with the opportunity to be a part of that program, which has made me great friends, memories, and has resulted in me learning much more about myself and the world around me. I am equally thankful to both the CyberPeace Institute, where I worked in the first summer, and National Branch Chamber "Fruits and Vegetables," for being the best colleagues and teams I could have asked for, for entrusting me, and for being so ready to help whenever I needed some.

