Ivan Sirotkin

Interview 1

Why do you work in robotics?
It is an interest of mine. Robotics is a future part of the world, so I feel that I want to learn some more about it, being involved in a robotics club. Also, students can start learning about it. The main focus at ISP is that the students, who are involved in robotics, take part in an international competition, with different sort of rules and conditions, where they have to build a robot and perform a task.

What is the task?
The task changes every year, but it's a complicated sort of task, where the students have to work with 6 by 6 meter field and the robots have to do different things. For example move balls, which are placed on the field or little blocks, they have to climb ramps, lift themselves up and so on. Students have to write programs for a robot, so it does things by itself and they also have to design the robot, so they can control it. For instance, using Xbox controller.

And what exactly do you do in this club?
I set everything up, make sure that both, competitions and the clubs occur. Also, I create a field (place) for competition, do the buying of equipment and I make sure that the facilities are ready for students to use.

How often does the main competition take place?
Once a year, but the smaller competitions are a month before the main one. For example on Saturday we are running a competition with another school, where we will trial the robots and see how they work.

Are you the director of the club?
Yes, I am.

Do you have any assistance?
Yes, I have a partner, Mr. Rayworth, who works with the programming side. He helps students to set up computer programs.

Approximately, how many kids are involved in this club?
There are 9 at the moment.

You said that you organize the competition. Which sort of programs do you use to record data for them?
Now, for the official program we use a proprietary program, provided by First Tech Challenge in the USA. We log on to a database in the USA and we record the teams and just enter the scores, as the scores are calculated for us. But for small competitions inside the school, we use a notepad and a spreadsheet, because we don't have access to the main software of the main competition.

With what kind of data do you work with?

Numbers. We record the points that within a competition each team gains. To record the scores, the competition runs for let's say 3 minutes and then stops, in order to count what the robots have achieved. There are different sorts of things, which robots can do, so students count how many points their robots have gained and if they have a penalty, then the points are deducted. Formulas are used for working with numbers. Later on the teams are ranked by the amount of the points.

Is there anything you dislike in doing robotics?
No.

Are there any issues, apart from not having a program, for small competitions, for calculating the scores?
The problem is that this is the first year we are setting it up, we are preparing to host the main competition next year. We need to go and buy the necessary equipment. For example, having the equipment to talk to each other. We need to have two separate Wi-Fi systems, powered hubs, which connect to the power, because the USB doesn't provide enough power. So these problems are found and solved, as we set the system up.

And do you need a program for small competitions, which is, for example similar to the program, which is used for the main competitions?
Yes. You need to have names of the teams identified. It will consist of numbers.
The approximate number of teams needed in the program is 15. One robot is one team. So what I am looking for is a program, which will record the scores, at the moment just for two teams, but later on it will be possible to expand the number of the teams, up to maybe 6 teams or 10 teams. During the competition the judge will be walking around and just inputting the scores, at the same moment as the competition is running. The system should be able to sort and rank the teams from the highest to lowest.