

### **CanSat case study: Daisy Richardson**

# FROM SCHOOL PROJECT TO SPACE INDUSTRY CAREER: CANSAT PROPELS DAISY FORWARD

#### It all began with CanSat

Daisy was at sixth form at Allestree Woodlands School in Derby when she first heard about the CanSat competition.

"CanSat took about a year in total. There were six of us in a team supported by a teacher. We met at lunchtime and after school. The UK competition was in York and I think it was three days. It felt non-stop but it was really fun. We then won that UK stage and went on to the European final in the Azores."

"I did the parachute design. I made and designed the parachute for the can. There was a main parachute and we had a drone one, which was much smaller. Constructing a normal sized parachute would probably be quite difficult in itself. Constructing a parachute that's got to fit into a tin can is very difficult, because it's a tenth of the size. But we did it!"

"When I was taking part in CanSat it definitely helped my motivation in lessons at school. It gave me a why to what I was learning, as some of it I needed to be able to use immediately for CanSat. I could see how the information was going to be applied to real life."

Daisy recognises the impact that taking part in CanSat had on her university and career choice.

"The best thing to come out of it is definitely my job. My career prospects changed completely. I'm so glad they did, because I actually don't think I would have liked the super academic environment that I was looking at going into. I also think one of the good things is the skills that came out of CanSat and the knowledge of what a mission is actually like; I don't think you really get that in any other work experience. When you're working in the space industry, and you don't have any engineering experience, I think having that mission and planning experience is really useful."

For more information on the CanSat competition, please visit: www.stem.org.uk/esero/cansat



## Increased confidence

"The confidence it gave me was massive. I remember not knowing how I could contribute and then I ended up being the sole person working on the parachute. It makes you realise you CAN do it!"

"It's made me more confident in saying yes to opportunities. Now I say yes to things that I wouldn't have done before and it has opened doors for me."





#### A career in the space industry

Since competing in the CanSat competition, Daisy has completed a degree in physics and joined B2Space through their internship programme.

"Now I work for B2Space. Our mission is to send high altitude balloons to allow us to launch rockets from a high altitude. It reduces the cost of small companies and businesses launching payloads to space as it's much cheaper. Universities use it for research too. I did an internship with them and ended up loving it so much that I stayed!"

For Daisy, CanSat hasn't just given her the motivation to find a job in the UK space industry: it also increased her knowledge and gave her a network of contacts to encourage her in her career.

"CanSat just made me want to do it even more. I became so focused on getting a job in the space industry. I use the skills learned during the project every day, even some of the knowledge! My career prospects changed completely from taking part. I gained real connections within the UK Space Agency which really helped when it came to applying to university and getting a job afterwards."

### **Encouraging girls in STEM**

Daisy has fond memories of the CanSat experience and continues to advocate for more girls to take part in teams across the UK, as well as encouraging girls to consider a STEM and space career.

"I go back into schools to encourage younger girls to consider this career too. I'm not a very stereotypical person who might do a physics degree and work as a rocket scientist. But I'm really passionate and dedicated to my chosen career. I want more girls to know they can do it too and see that this is what a girl in STEM looks like! CanSat was part of that journey for me and I'm so glad school were taking part."

"It is a great feeling knowing that I'm actually encouraging other girls into it now and breaking the sterotype."



### Widening participation

Daisy also recognises the benefits to her school:

"It has been really good for my school too. Now they have a rocketry club and they do a summer school for new year sevens which includes mini space projects.

They have made incredible connections with Rolls Royce as well, who are based just down the road. That has been great for supporting students with work experience."

