

## **Meet the Academic – Dr Farah Villa Lopez**

### **Introduction**

My name is Farah Villa Lopez. I'm an assistant professor at WMG. My background is in mechanical and electrical engineering and I have a PhD in micro sensors and electronics.

### **What route did you take into your current role?**

My favourite subjects at school were actually maths and physics, so of course when the time came to decide which further subjects I wanted to take, naturally I went for the technical subjects. So maths, further maths and physics as well.

### **What inspired you to become a scientist?**

Definitely my parents. So my dad was a mechanical and electrical engineer himself, so I definitely remember him working, say, fixing our family car or fixing things around the house. So I'll be always there, helping him with obviously simple tasks like holding the flashlight and passing on tools. But I quite enjoyed the practical aspects of those activities.

### **Can you give me some examples of your day to day responsibilities?**

On the daily basis, you could find me for example in the office preparing some lecturing materials, or communicating with some stakeholders, or overseeing the delivery of the engineering course. You might find me as well in the classroom lecturing the next generation of engineers, or even in the lab doing some experimental work with the students, as well as some of my own research experiments.

### **What challenges have you faced over the course of your STEM career?**

I guess one of the main challenges would be right at the start of my career at university level, where of course there was like a large difference in gender gap. So at school at university in my course I would be perhaps like one of six or seven girls in a cohort of about 150 students. So it was a bit challenging at the beginning to sort of like adapt to that sort of a new environment. But of course I I greatly enjoyed working with my colleagues both male and females.

### **What advice would you give to someone aspiring to go into a STEM career?**

These simple advice would be just go for it, so if that's something that you are curious about or that you feel and you would really enjoy doing it definitely do not get put off by the technical subjects. That's just one part of it. If that's something you enjoy, and if you're passionate about it, you'll be able to overcome almost about any challenge.

I would like to research into new innovative sensing technologies for a variety of applications, say healthcare and air quality monitoring, but in particular for the automotive industry from all areas of the sector, say from development, to testing, characterization, and of course and user experience.