

Meet the Academic – Dr Mona Faraji Niri

Introduction

My name is Doctor Mona Faraji Niri and I'm an assistant professor. Research focused in energy Systems group, WMG University of Warwick, and I'm posting a new generation centre now. I am specialised in modelling, control algorithms and artificial intelligence for dynamical systems and specifically energy storage systems.

When you were younger, what did you want to be when you grew up, did you want to be a scientist?

I was into reading biographies and autobiographies a lot. I still remember how impressed I was when I read about Katarina Johnson. He was one of the scientists, one of the mathematicians who basically helped with putting the first man into the orbit, sending in the spacecraft. So yeah, that was basically what I really enjoyed when I was a teenager or younger.

What inspired you to become a scientist?

Reading about those people and how they have done it actually inspired me a lot and I was also very much into doing things experimentally. I was into those kind of activities at the school and then that's basically what I'm doing at this moment at this role as well.

Can you give some examples of day to day responsibilities?

I regularly write reports, preparing for papers, conferences, talks to share the findings with everyone else. I have some students like PhD students, interns and undergrads. I spent some time with them just making sure that they're doing all right. I also have some on daily basis work. I have some meetings I need to attend so that we exchange the latest developments with our team members.

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

So the first thing is obviously focus on math and develop some writing skills. You're going to need it. If you are interested and you feel that it's for you to know more about what's going on around you in the world that you live in, just go for it. There are a lots of opportunities in the STEM world and STEM career. They are very good jobs out here. Well paid jobs. Talk to people who have done it before, who are actually doing the job that you are thinking to take in future and hopefully that will show you the way that is best suited to you.

What would be your dream research project, if you had unlimited funds?

So I'm working towards the application of artificial intelligence for battery manufacturing for improving the battery manufacturing processes which is very important for the impact it has on the climate change etc. And I would say yeah, I put that money on that and hopefully that would help to accelerate the material design, structural design of deleting my batteries and to help us move towards that Net 0 future everyone is talking about.