

International Women in Engineering Day: In Conversation

Episode two

Voiceover [00:00:03] This podcast is brought to you by the University of Aberdeen.

Sarah [00:00:09] Hello and welcome to the next in our series Celebrating Women in Engineering, and our latest guest joining the series is Leanne Potter. Leanne, tell us a little bit about yourself and what type of engineering you are studying.

Leanne [00:00:23] So I am in the third year of my mechanical engineering bachelor's degree at the uni.

Sarah [00:00:31] At the University of Aberdeen, obviously.

Leanne [00:00:33] Yes, at the University of Aberdeen.

Sarah [00:00:34] Yeah studying quite differently. Now, I imagine during the recent activities, have you been able to get back onto campus and have access to labs? Or is it is it still more digitally based learning?

Leanne [00:00:47] I think in the first semester of last year, we were able to go in a little bit to some tutorials. I think we were in maybe once a week, which I think was quite good. I think last semester we went into often

Sarah [00:01:05] it's such a beautiful campus. It's strange to think that we've had to adapt to working differently and studying differently. But it's at least students are set up to work from home so well and studying. You have all of your all of your materials there. What inspired you to study mechanical engineering?

Leanne [00:01:24] Yes. So my father is actually I think every engineer that I've spoken to has a family member that does engineering. So, my father is also a mechanical engineer and he has he had quite a close group of friends at his uni. I grew up and they'd all go and like sort of holidays and things. I grew up sort of surrounded by other engineers around my father's age and obviously being in a nosy and busy child, I'd always be looking over, try to see what he was doing, asking him, just sort of trying to make conversation with my father about what he was doing and it is quite interesting I think, because it's sort of really using science quite practically to solve everyday problems and I quite like it because you can sort of see what's going on.

Sarah [00:02:22] One of the lovely things that when you're saying, you know, many engineers who grew up around engineers and it was that exposure that I think is so inspirational, but it makes it feel accessible as well. So, you made me smile, though, and you said, nosy, I like the word curious, but I am equally like you. I am nosy and but curiosity, I think, is a great skill and many engineers have that in common. This idea of wanting to know more and asking how things work, but the access to that inspiration in that idea of of of what it means to be an engineer. Do you think that is? Did you have a list of all the things that you wanted to be when you grew up or was engineering always, there on the list, and you just sort of had to decide what kind of engineer you wanted to study?

Leanne [00:03:12] I think I wanted to do other things. I'm not sure how realistic they were. but, you know, I wear glasses. I couldn't have been a pilot. But I think it's just having someone that studies that also did engineering. I think a lot of people don't see it as being

something accessible, as you were saying. Like, it's not because you're not really taught in school is a subject very often. You're often instead you are taught physics and maths. I think, you know, studying a physics and maths degree, I found that like I wouldn't have felt that that was really accessible to do so, I can understand why people wouldn't think engineering like, oh, that's so scary and it's not scary.

Sarah [00:04:05] I love that. One of the things that the that it's that excitement, it's obvious that you're excited about what you do and when you think about finding a job that you're going to have to do every single day for a really long time, you it's got to be something that that you love doing that and that inspires you and keeps that curiosity alive. You think about studying engineering. What do you enjoy most about studying engineering at the University of Aberdeen?

Leanne [00:04:33] I think my favourite part is I know it's going to sound super cheesy, but it's become especially obvious over like Corona time, over this sort of working from home, how sort of the passion from the lecturers is so, so infectious. There are some subjects and I still they're not my favourite subjects of things that I'm not particularly interested in. but the lectures did sort of make it interesting and especially over Corona. They've really adapted. It everything some lecturers have done, like a complete overhaul of the whole, you know, structure just to make it easier online to go through, So I quite enjoyed that aspect

Sarah [00:05:21] of all the disciplines to adapt to covid you you would hope that the engineers who specialise in problem solving and creativity being those those those skills underpin it, rose to the challenge and it's lovely that you were inspired in a different way of learning and different. I always think the person teaching you makes such a big difference. If it's somebody who loves what they do, then actually I would say there's some amazing people that I work with and I'd go to top of them reading their shopping list because there's something about them that I want to to be near and be inspired by but when you think you're covering quite complex topics and quite complex concepts to to understand and the pressure of everything that we're going through at the moment, somebody who can make it fun and engaging and entertaining in that way is great because it's things are different now. Being able to adapt and be resilient is brilliant. So, yeah, the university lectures will be taking a pat on the back and saying, oh gosh, we did, we did a good job, we did a good job and the team at the university were like we'll have to quote that when we start student recruitment.

[00:06:28] I know that's why I was thinking that's so cheesy like me saying it. But no, it's true.

Sarah [00:06:32] No, it's not cheesy. I think and I'm a big fan of a certain amount of cheesiness, but actually it just comes from being excited and passionate, but also honest. So it's I can see your face. The others can't see your face but I know you're telling the truth. I'm thinking if this is definitely something that they'll be able to promote to other students who this idea of, oh, it's not the same as going to uni, but it's just different and it's the celebrating opportunities and seeing the positive. It's all good stuff. This year's theme for Women in engineering is Engineering Heroes. Who is your engineering hero?

Leanne [00:07:12] I my engineering hero. I don't know if she's like to commonly talked about. I'm part of like a society to encourage at the University of Aberdeen to encourage girls into studying engineering further. So as part of this we have workshops. We usually highlight erm sort of significant women in engineering and my favourite one, obviously I'm

biased, but my favourite one is Dr. **Mae Jemison** and I hadn't heard of her before. We started researching for this workshop but she is just incredible. She is like a professionally trained dancer doing like, jazz, ballet. She's choreographed for musicals and things. On top of that, she has a chemical engineering degree. Then after she did a chemical engineering degree, she went on to study medicine. So she is a medical doctor and she worked for the Peace Corps in refugee camps for a while. Then after that, she came back, went back to uni again to study engineering where she then after that she applied to NASA and became the first black astronaut, black female astronaut in space. Currently, she is a professor at Cornell University. And I just think as if that's not the most inspiring woman, she can just do it all,

Sarah [00:08:47] that it's almost like, gosh, what next? What next? What next? This is her story. Sounds very similar. When I met Dr Kevin Fong and when he went to university, he opened the university study guide and started a search. He did astrophysics and then he thought, well, this is building medicine next door. That doesn't look too hot, so I'll go and do that and then he did an engineering degree. He can fly. He can fly a helicopter, I think. So he was a doctor and an engineer and he works similarly applying both of those to sort of emergency medicine and you should Google him. If you love **May, Jameson** and I'm sure you will love Kevin Fong and his story as well. It's this idea of just applying. You've only got one life but to make the most of it and to do all of that, but to be constantly be giving back, I think those are the heroes. We do think of them as people who give and sort of inspire and spend a lot of time thinking about other people is along in that in their journey. So someone who can just keep learning to add more tools to their tool belt, I think is incredible. To be able to save a life and build a bridge, and then go into space and so. So I think it's important that we celebrate these women. It's so important and what's the name of the society that you're a member of at the university,

Leanne [00:10:14] So, the name of the society is Robogals because it's like a global organisation. So if, you know, there's quite a few in other universities as well. Yeah, I think it's really important to celebrate just diversity in general. I think I mean, everyone knows that there aren't as many women and women in engineering. I think there's more women in my engineering cohort compared to, say, my father's engineering cohort when he was studying. God knows how many years ago. I think it's really important because, you know, we come from different backgrounds, those things that I've experienced as a woman that say a man might not have experienced that I can, you know, bring that our diverse experiences together to make things better.

Sarah [00:11:10] having diversity of voice in a team. I'm a big believer. That's when the magic happens, when we build a team with people who don't think like us and we just kind of cover all of those bases and I do this quite often with children at Tech Fest. I love getting kids approach to things. It's very simple, but there's something amazing with their ideas. You're right, it's that diversity of thought and experience and bringing that together. and women, you've suggested and from what I've seen, you know, we do think differently about different things. It's good to have everybody's contribution to the solution. What do you aspire to do in the future once you've completed university?

Leanne [00:11:54] Well, I have always been interested in computer science, but I think it's as we were saying earlier, it's about sort of being exposed to it. I didn't really know anyone in my family that had sort of done computer programming and that sort of thing before. Then I came to university and we did some courses and I really got on well with them. I think it's partially computer programming. It's just the lazy person's dream because you

can sort of automate stuff and not have to spend a while doing it and once you've got it set up, you can just go with it.

Sarah [00:12:36] Brilliant. I love that. I love that description is helping everybody out. It's saving time. So you hadn't had experience of that until you've been at university, but now that you've had the opportunity to get hands on with it, that's on your wish list.

Leanne [00:12:50] Yeah. No, I definitely I'd like to maybe find a job in that sort of area. I think a lot of engineering is moving towards computer programming and like finding jobs, a lot of them sort of would like you to like know how to programme.

Sarah [00:13:06] There's a lady that we're going to be chatting to later in the series and she turned her hand from an engineering degree and she now works in cybersecurity and so that's the same. There's a real spike in opportunities around digital is the ability to go and do it differently in different industries as well. It's a really exciting time, I think, for tech and problem solving and just applying that creativity. So do you have a wish list of employers that you'll be taking to the student recruitment team to be saying, this is who I'd like you to help me get a job with? Or will you be looking for guidance from them? Or do you feel that you'll be you're pretty set on your own? How confident are you about accessing that next step?

Leanne [00:13:52] I think you're going to speak to Regina in the next few podcasts. I've spoken to her before and I'll be honest, when I went into it, I did think I'm not sure what she can tell me, but I'll go into it. You know, we get some free help and it was actually incredibly useful. I think it's nice to get help from someone that isn't your parents or isn't your friends because they didn't know you and they, well, because obviously your friends in your family already know you and they're already biased and they understand how you speak already, if that makes sense. Whereas someone impartial might say, well, actually, I think you should phrase things the way that you said this was a little unclear or, you know, expand on this. Whereas if you're talking to your friends and family, they already have that background info. So it's less impartial so that she is just incredibly helpful and so lovely, too.

Sarah [00:14:56] Yeah, well, I'm really looking forward to meeting with her and chatting to her because it's a great service that the university offer, and it's that ability to help you make that next step and reach your full potential. So that's that's what everybody's here for, is for everyone to reach that positive destination and to be successful. Then in future years, you'll be asked you might be the industry professional that these podcasts will help profile. Then later on in the series we are going to be chatting to an industry professional. I have given you a bit of a clue as to who that is. But if you could ask this industry professional a question about engineering, what would it be?

Leanne [00:15:33] Yes. So I would ask her, what was the biggest barrier you faced in industry and what advice would you give to overcome it?

Sarah [00:15:45] I look forward to posing that question to our industry professional in a later podcast. Knowing how brilliantly you get on with Regina, I'm even more excited to be chatting to her and our previous conversations with other members of the university. Definitely. It's lovely to think that all of these opportunities are on our doorstep and up for that of the group. I have heard of robogals at first. We have worked with robogals. I think it's a great society. This opportunity for young people to see it, to be it, I think is is great. I am looking forward to it, I might go and read a little bit more about **Mae Jamison** now as a

hero, but also it gives you that opportunity where you've benefited from having that exposure at a young age and seeing what engineering is and what they do. I think all of these projects that help us get into schools and work with young people so that they those who are born engineers and ready, ready to do it, that they know that's an opportunity ready for them and just harness some of that potential problem-solving and creativity that's in there and their ability to the world. Engineers are always on my top list for desert island guests. You know, I need an engineer to come with me. So it's definitely, great meeting all of you guys. I wish you the best of luck in your career, in your studies. I look forward to joining my fellow alumni from the university in the future. And congratulations for surviving and thriving during this global pandemic and enjoying your university experience. So thank you so much for giving it your time. It's been lovely to chat to you.

Leanne [00:17:25] Thank you. It's been lovely to chat to you as well.

Voiceover [00:17:30] This podcast has brought to you by the University of Aberdeen.