



# **Dr Sue Black OBE**

Interviewed by

**Kerri Mansfield**

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*Right, I believe that is now recording. It's 10<sup>th</sup> of February 2017, and we're in the hall of the Worshipful Company of Information Technologists. I'm Kerri Mansfield, an independent trainer/coach and business consultant, and today I'll be talking to Dr Sue Black OBE, who is a senior research associate at University College London, and was previously head of the Department of Information and Software Systems at the University of Westminster.*

Yup.

*Dr Black was the founding chair of the BCS Specialist Group BCSWomen, and is an advocate of women in computing. Thank you for being here today.*

You're very welcome.

[00:42]

*Your public bio glosses through your early life rather swiftly...*

Mm.

*...and moves on to your achievements. So can we take a step back and have a look at that early life?*

Sure. Yeah yeah, absolutely.

*Tell me about your childhood years. I read somewhere that your original ambition was to drive a London bus.*

Yes, that's true. [laughs]

*Have you done it?*

Yes, I have. Yeah, I actually drove one around Bletchley Park. Bletchley Park arranged for me to, to kind of like, realise my dream and drive a bus. So I drove it. I had a, a bus driving, kind of, half an hour, get up to speed on how to drive a London

bus lesson around MK Dons, around the car park, MK Dons. And, and then, yeah, and then I drove it round Bletchley Park. And I only hit the kerb on, just at the last, like, circuit of what I was doing. And, a load of geeks came along for the ride, literally, with me, and, yeah, it was great fun. It was actually a really great day at Bletchley Park. But yeah, so when I was five...

*And do you regret not being a bus driver?*

A bus driver. Not once really [laughs] have I regretted being a bus driver.

*Good. Good.*

But, yeah, I've always loved vehicles I suppose, I love planes, cars, trains. I love sort of, engineering-y type things. So, yeah, I've always been very excited about vehicles. [laughs] Which doesn't sound very exciting does it, now I'm saying it.

*No, it sounds really rather good to me. [laughter] I rather like that.*

[02:08]

*I don't want to delve into personal details of your history, as it's well documented that you've come through some fairly difficult times.*

Yes.

*What I'm more interested in is, can you tell us where you found your strength to get through those times?*

Mm. Well, I think it's hard to say, because, I think it's quite hard to analyse yourself and exactly why you do certain things and how you do them. But, I guess... I mean you know, I guess that I, when I was younger I was loved as a kid, and, you know, I think I must have been well looked after by my mum and dad. And, I guess that gave me a kind of strong foundation. And then... So then, you know, like, the difficult times started really when Mum died and my dad remarried, and, I guess that kind of kept me going through those times. And, I think the difficulties that I had as a

teenager, after my mum died, probably, going through all of that, and being probably quite depressed for several years, then, I think that kind of stood me in good stead later on, because that was so awful that anything else that happened after that didn't seem so bad. I mean obviously bad things do happen, but I think, I guess having that difficult sort of in my formative years I guess, probably helped me through the other things that happened afterwards.

[03:33]

*That's really interesting. Thank you. And you married quite young.*

Yeah, 20.

*And had a family, yes?*

Yes.

*And, how you dealt with that is inspirational to many people.*

Mm. Mm.

*What values and behaviours, knowledge and skills you picked up, you just mentioned some of them, is that what you drew on to move you through the next set of difficulties?*

Yes. Well, [laughs] yeah I guess so. Well I mean, you know, I kind of, it's, I suppose, a cliché, but you, that you kind of, marry someone who kind of carries on... If, you know, if you come from a dysfunctional background, you end up marrying someone who keeps you in that dysfunctional way of life. So I absolutely had no clue I was doing that, but I did that. And so, you know, I married someone who was a bit of a bully, and, unfortunately towards the end of our time together started becoming violent, which is why I left him in the end. And I think that, you know, I had some very difficult times then, and I do think that, because things had been really awful before, I kind of knew, you know, I kind of was in the awfulness, but then thought, well I got out of that situation so I can do it again, I guess. So I think, and that's kind

of been something that's happened over and over in my life. Things have, you know, got better and better and better. But I suppose that's, that's one of the reasons maybe why I do take risks, and I will kind of put things out there, because, so many, so much worse could happen, you know, things could be so much worse, that I just really, I'm not bothered about that at all. So things that would frighten other people, just don't frighten me at all.

*So the fear of fear...*

Yeah.

*...is no longer there, effectively.*

Well, I still get it, and I'm in it for a bit, and then I think, well, sod that, I'm just going to do whatever it is anyway.

*But you're not frightened of putting yourself in a position that will stretch you?*

No. No, no, I don't think so. And, I suppose I've just done that over and over again. You know, like, the first time I taught a class of students, I was absolutely petrified, and I didn't sleep the night before I was so scared. But I did it, and then came out of that classroom thinking, wow, that was amazing, I really really loved it. And then gradually kind of got over my fear of standing up in front of people. And so, I think because, you know, I've just done that over and over again in, in different circumstances, so like, well the first time I was on, like, live national TV, I was absolutely scared stiff. You know, I sat waiting to go on to live TV thinking, I would honestly rather have a heart attack and die now, just, go off to... you know, they can just cart me off [laughs], than go into that studio.

*Than go into it, yes.*

But I just made myself do it. And the thing is, once I had done it, I was elated, you know. So it's the same thing again, you know, when you really push yourself to do things that scare you stiff, once you've done them, it's just like, better than any drugs

you could ever have. [laughs] Not that I've ever taken drugs obviously. But you know, better than any other thing that you could do really. So that kind of adrenaline rush I guess is, is what helps you to realise that, you know, good things do happen if you push yourself.

*Yes. And it's coming from within.*

Yeah.

*The whole energy and excitement and all the rest of it.*

Yea. Yeah.

[06:38]

*That's really cool. Thank you. You've had an interesting educational career as well, haven't you.*

Yeah, yeah.

*You took a degree while bringing up a young family.*

Yeah.

*Not an easy thing to do.*

No.

*And ultimately, that led to your doctorate.*

Yes.

*What set you on the path of maths, computing and engineering? You've mentioned your love of vehicles.*

Yeah. [laughs] Oh I love vehicles. Well I think I was always a geek. I think, you know, I just was born one probably. I can remember when I was about six or seven that... Well someone asked me a while ago, when did I first know that was a geek, and I thought back to when I was about six or seven and I used to save up all my pocket money, and then, when we used to go to, like the local shopping centre, I would rush to WH Smith's and spend all my money on maths textbooks, because to me that was the most exciting thing that I could buy. I always loved stuff like mental arithmetic and puzzles and, and working stuff out. So that was always just there from when I was a kid. I loved playing cards, so I think, card games and, you know, numbers, and sort of, mental arithmetic, there's a lot in there too. And so, you know, that's from when I was younger. I was always best at maths at school, that was my best subject, and I loved it the most.

*Yes.*

[07:53]

So, you know, I left school at sixteen because of my sort of home circumstances, and then, when I decided that I wanted to study, maths was the obvious choice for me really, because I just thought it would be easiest, apart from anything else, but also I kind of missed it, you know, I'd sort of, had ten years, you know, I left school at sixteen with five O Levels and then had ten years going out there into the big wide world, getting married, having three children, and then at 26, I was desperate to do some studying. So, maths to me was the most exciting thing that I could study really, so I did the maths course at the local college. Then that got me into uni, and then did computing, because I thought then and I still think that technology is the future.

*Yup.*

You know, and, and that's kind of been borne out, it's like... So I started my degree in '89, so that's like, is that 20 years or 30 years? [laughter] Get mixed up with decades now.

*Yes. Yes, anyway, it's a while ago, it's it, yes.*

Yeah, it's quite a long time ago. Yeah, so the computing. And then, it was quite funny actually, because... So, I, you know, I enjoyed my degree; it was difficult because I had three kids, so I had to take them to school in the morning when they were younger, I'd drop them off at school at nine, I'd get to uni at ten. The lectures started at nine, so like, I'd already missed the first hour of lectures, if there were any, then. And I had to leave at two to pick up the kids up at three, and lectures went on till six. So, you know, I, I missed quite a lot. But I managed to just about keep up. And, yes, so in the final year of my degree my PhD second supervisor asked me if I was interested in doing a PhD. So I said to him, 'Oh I'd love to do a PhD.' But what I didn't tell him was, I didn't know what a PhD was. [laughter]

*Sounds nice, let's do one....*

I knew it was a good thing.

*Yes.*

But I didn't know what I was.

*Yes.*

[09:36]

So, so I went out and had to, like, go to the library and look it up, because it's like, pre-Internet, those days.

*Of course, yes.*

And, and looked it up and thought, oh yeah, I really do want to do a PhD, it's research. Yeah, great, I love research. Yeah. So I then did a PhD in software engineering, which was kind of up and down, and again, you know, it wasn't that easy with the kids. I had to do lots of teaching to earn enough money to feed the kids and stuff. So, I was quite slow, it took me seven years to do it.

*I don't think that's particularly slow for a PhD.*



No? Oh OK. Well I suppose... So my husband now has got a PhD as well, and he didn't have any kids then and it took him seven years, so actually, I think, yeah, well... [laughs]

*So you were lightning speed really. [laughter] with all the other stuff as well.*

Yeah, so in the middle of that I became a full-time lecturer. So then I was doing it part-time, you know, and I still had the kids on my own as well. So, yeah, it was, interesting. [laughs]

[10:28]

*And, the subjects that you took are really overwhelmingly male subjects aren't they?*

Yes, I guess so.

*I'm sure a lot of the people on the course were men and [inaud].*

Yeah. So, yeah, my degree was about ten per cent women.

*Yes. What advice would you give other women following on that path?*

In what way, advice for what?

*Well, for keeping up with the work, for, getting to the lectures, to... How do you help them, what would you give them?*

You mean having kids?

*Yeah, with... Maybe with children, maybe without children. Just being in a male world really.*

Well I mean, actually, during my degree I found it fine. I mean, the other students... So I was like, 26, 27 then, with three kids, on my own, and most of the people in my

class were like, eighteen-year-old boys, away from home for the first time. But actually, that was fine, I mean we just d a laugh. And it kind of, for me, it was great, because it meant that I kind of suddenly had loads of sort of, younger brothers to like, hang out with. So, I loved it, I really really loved it, you know. And I'd go and play five-a-side football with them. [laughter] And, you know, and they used to kind of like, come round at the weekends, go down the park with the kids, with me.

*Lovely.*

So, it was really great. I mean, I absolutely loved it. And there wasn't any issue around, you know, sexism or anything that I noticed. So, yeah, so that was great really.

*It's brilliant. That sounds good.*

Yeah. At that point it was fine. It was only kind of later on going to conferences as a PhD student that I actually started really noticing sexism and stuff like that.

[11:53]

*OK, how did that, what form did that take?*

Well, so, the first conference that I went to, my supervisor, quite rightly, said to me, 'You need to network at conferences, because if you want to get your papers published, it's not only what you know, it's who you know. So chat to people, make yourself known to people in your area,' blah blah blah. So, at that time, you know, I was really scared of talking to people I didn't know. But, for my first conference I thought, well, you know, I'll set myself a goal, I'm going to talk to one person I don't know. I'm going to talk up to them and start a conversation, which was not something I ever really did at all. So, at the first conference I went to, there was a guy who gave a really sort of funny, down-to-earth talk, so I thought, I'm going to chat to him in the break, because he seems all right. So I went over and chatted to him, and we had a nice chat for about fifteen minutes in the break. And, then for the rest of the conference, whenever I saw, whenever he, I looked around, he was staring at me.

*Oh.*

And I just thought, why is he staring at me?

*Worrying.*

Yeah yeah, I couldn't work out why he was staring at me. And it's only like, ten or 20 years later that I kind of worked out what was going on, which sounds stupid now, but I think I didn't have a lot of emotional intelligence, because I hadn't really interacted with a lot of people, kind of in a professional way, at all. So... And, so, so that was quite traumatising for me, because I thought I'd done something wrong, I had upset him, and that's why he was staring at me, like, you said something, I don't know. And I was too scared to go and ask him why he was staring at me. So I never found out.

*Probably just as well you didn't.*

Yeah, yeah, no absolutely. No, yeah, I'm glad I didn't. And then...

*The answer being, 'Here's my phone number.'*

[laughter] Yeah, exactly.

*'Here's my room number.'*

Yeah. Yeah, so it was quite obvious, right, having this conversation now, what was going on.

*Well from the other end of telescope it always is*

Yes. Yeah, yeah yeah. But honestly, I had no... That thought did not even cross my mind once. So, then, sometime after that I went to a women in science conference in Brussels, and, I kind of walked in, and it was like, I think it was like, 99 per cent, there was like, one or two men there and like, 100, 200 women. And, I walked in

apprehensive, because of my experience at the previous conference, and in my head I was like, oh I've got to talk to two people at this conference, but I'm scared, you know, I don't want to do it. And, I walked in, and, you know, I have my name to the lady at the check-in desk, and then went over to get a cup of tea or something. And... And it was amazing, because, I didn't have to ask, I didn't even have to start any conversations, because, everyone was chatting to each other, and someone just said to me, blah blah blah, 'Where have you come from?' And started to chat to them. Then we were in a group chatting to people. And then... It was just very chatty. And, I didn't even have to think about starting any conversations, because they were all just happening everywhere, and I was just joining in with it.

*Lovely*

And that really helped me see what it's like to be in a minority, and then the majority, I think that was a big lesson for me, and, that if you're in the majority, life is just so much easier. You don't have to think about things, there's no sort of traumatising. So, so that was, yeah, that really was a big sort of lesson for me. And, at the end of that conference, I can remember... I actually got interviewed by *Nature*, by a journalist from *Nature*, and she said, you know, like, 'What's your take-away from the conference?' And I said, 'This conference has just completely changed my life.' Because suddenly I saw that it wasn't me, and that I was shit at talking to people; it was because I had sort of, been in a minority, trying to be in a different kind of world to one that I was comfortable in.

*Yes.*

[15:21]

So that was a major sort of... You know, it seems like a very simple thing, but that really opened my eyes and my mind to...

*Absolutely, yes.*

And, and it was that that led me to set up the BCSWomen group at the British Computer Society. Because I came back from that thinking, well if I feel like that in those conferences, there must be loads of other women who feel like that too.

*Absolutely. Yes.*

And if I feel like that at conferences where there's all women, then surely loads of other women will feel like that too.

*Yes, exactly. Yes.*

So why don't I try and create that kind of feeling online? Because we're not all meeting each other at conferences, but we could meet each other online.

*Yes.*

So that's why in '98 I set up the sort of first BCSWomen group, and, yeah, it was a success right from the get go really.

*That's excellent. I really like that. But you also mentioned there a cup of tea. I notice we've got them here.*

[laughs] Yeah.

*I haven't even offered you one. Would you like a cup of tea?*

I'd love one. [laughs]

*Would you like to help yourself? I'm really terrible at tea.*

Thank you. Do you want a tea?

*No I don't, I don't have tea or coffee.*

Oh, OK.

*So that's why I'm so bad and I never thinking of it. And I just, when you said a cup of tea, I thought, ah, there's a cup of tea sitting there. [laughter]*

Thank you.

[16:28]

*I was looking at some of your online, I can't remember if it was Facebook or it was Twitter today, one of your mentors has received an award.*

Yeah.

*How much difference has having good mentors made to you?*

It's massively boosted my confidence, which has allowed me to be me, I suppose, in a way.

*Mhm.*

So the same kind of way, like, with the conferences, right. So, if you're in an environment where you are like, scared, and, you just can't be yourself, and so you won't achieve the things that you could achieve. Whereas if you're in an environment where you feel comfortable, you will be more yourself, and so you, you will achieve things. So I think it's quite un-straightforward. So having Wendy Hall as a mentor, just massively boosted my confidence, and, you know, I just wanted to be like her, when I met her. She gave a talk for, I think for BCSWomen, in, yeah, in London. And, at the end of the talk... She was talking about how, when she was in charge of getting a new building built at University of Southampton, and, going through the architects' plans, and, she put in, I can't remember exactly what it was, but like, women's loos on every floor, and men's loos, or something like that. And then, you know, the architects would go away, they'd come back, and then, they would have got rid of lots of the women's loos again. And, so she'd put them back in again. And so, she just talked about this kind of struggle, and, you know, it was a really basic and

simple thing, and something you'd think you wouldn't really have to think about. But there weren't enough women's loos. And I think, I can't remember, when they built it, whether they did what she wanted or not, I've forgotten. But, she gave a great talk. And so at the end of that talk I thought, I just want to be like Wendy Hall, she's so amazing. [laughter] I'm going to ask her to be my mentor, because, I don't know, she just, I want to be like her.

*Yeah, you suddenly felt a connection there.*

Yeah, yeah, absolutely. So I chatted to her at the end, and I said, 'Please Wendy, will you be my mentor?' after, a bit of a chat first. And, she said, 'I can't. I'd love to, but I just don't have enough time.' So I said, 'Please, please. Can I just have one hour a year, just one hour a year? Because that will make a massive difference to me.' And then she said, 'Yeah,' thank goodness.

*Yes.*

So then, like, we arranged to meet for lunch, so we had that sort of, one hour, I don't know, a few weeks later. And, you know, just being able to talk to someone with her depth of knowledge, her expertise in the area, her kind of, very, girl power kind of, you know, just the way she thinks and talks. And, just having an hour with someone like that when you're sort of an under-confident person trying to work out who they are, what they're doing, and how to get up the ladder, can make a really really massive difference. And even if she had only ever given me at one hour, that would have made a difference to me.

*Yes.*

But, so kind of, gradually over the years we've become friends, and, it's quite funny now, because, you know, I think, then I was, like, a PhD student, you know, and now I'm, [laughs] I don't know what I am now, now I'm me, whoever I am now. And, so we ended up meeting, you know, like, at conferences in different countries round the world [laughs], and stuff like that, and I just think... Oh I don't know, it's just amazing, it's amazing. You know, like, I sort of, bumped into her in a conference in

San Francisco, and then we went for, like, a frozen yoghurt together, and we were chatting about... You know, so we've known each other quite a long time, you know, and she is, she has helped me in... You know, she's not given me loads of time, which is fine, because I don't need loads of time. What I needed as someone to give me that initial kind of boost at the beginning.

*Yes.*

And then who is just there, you know. Like when I've got a problem, which I think she can help with, which is, you know, is probably once a year, you know, it's not a lot, I know I can send her an email, or, you know, now I can message her on Twitter, like, you know, I persuaded her to get on Twitter, and, she'll get back to me within hours, even if it's... I don't think she sleeps. You know, so, you know, I often get emails from her at like, three o'clock in the morning. Well she's probably sitting in bed on her laptop.

[20:30]

*It's interesting you say that. I've noticed there's a lot of people who get a lot done in their lives, sleep a lot less...*

Yeah, probably.

*...or watch a lot less television...*

Yeah. Yeah yeah.

*...than people who don't get quite so much done.*

Yeah, I kind of... I mean I like watching TV, but I kind of, always feel as I sit there that I'm wasting my time. Unless it's something that really is really really riveting, which most of the time it isn't.

*Yes.*



Yeah, no that's true I think. And I think... I mean you know, you do have to have some down time, and do things. But, I think we do kind of, waste a lot of our time.

*Yeah, we do. Which, we all do, yes, absolutely.*

Yeah.

[21:06]

*But you were driven, you mentioned setting up the BCS's women's group.*

Yes.

*And for that you got the John Ivinson [short i] Award is it?*

Ivinson [long i]. Yeah, John Ivinson Award, yeah.

*How did that come about?*

Oh I don't know. [laughter] But... Yeah, so John Ivinson was, was one of the presidents at BCS. And so, he was one of the people that were supportive of me at the BCS, and, you know, who I would go and talk to now and again, if I was trying to work out how to do something or other. And, yeah, unfortunately he died in, I can't remember what year he died. But, you know, he wasn't very old, and quite suddenly. And so, BCS... Well I think actually it might have been Wendy and Rachel... [laughs] Oh God, Rachel, past President, who's a friend of mine, who, I can't remember her surname. Rachel. Anyway. Who maybe sort of, instituted the John Ivinson Award.

*Yes. Was there a particular criteria for that award?*

I can't remember. [laughter] I can't remember.

[22:16]

*But, you've talked about the BCS's women's' group. You've mentioned it's online.  
But you also have meetings as well, I guess?*

Yeah. So, so what happened was, I set up an online group, and invited... I asked... Well so, to start with I did just in London, so, I asked the BCS for the email addresses of all the women BCS members in London, so they sent those to me. So I sent them all an invite to join the group, so about a hundred and something did straightaway. And then, I emailed everyone saying, 'What shall we do?' you know, like, this is why I've set the group up, what shall we do? Please introduce yourselves, kind of thing. And, then, I don't know whose idea it was that we should meet up in person. So I thought, well, yeah, that's a great idea. So we met up at a place on the Strand, in '98 I think, and about thirteen or fourteen of us had a chat. And the main thing that everyone wanted then was to know how to set up their own website, because that, you know, that was a very new thing.

*Yes, that was the thing, yeah.*

And there wasn't anything out there really on how to do it. So, I went, I was, I was on the BCS London, Central London Branch committee, so I said that to the committee, and asked for some funding to run some training. And so they gave us some funding. So I found a trainer, and ran sessions at South Bank Uni where I was then. And, yeah, so we ran training in how to set up your own website. And then, somehow, I can't remember how, I ended up speaking to some journalists about it. I must have been at some event and just talked about what we were doing. And, and that was that. And then, it was quite funny how I found out. So my sister was on the beach, I think in the Canary Islands, like, on a Sunday, reading the paper, and she reads the *Sun*, but she hadn't been able to get the *Sun* so she got the *Mirror*. So she was reading the *Mirror*, and, she had sort of, you know, been leafing through it, and then suddenly there was I, a photo of me, and all about the BCS women's group, like, in the centre of the *Mirror*, an article about women in technology I think.

*Brilliant.*

And, so I had no clue that that was there. And, so, you know, she like, texted me from Tenerife or wherever it was, saying, 'I've just seen you in the *Mirror*. Go and get...', you know, like, go and get a copy of the *Mirror*. So I went out and got it, and I was like, oh my God, I'm in the national press.

*The national press. Brilliant.*

Yeah, I had no clue. So it was so funny.

*Mm.*

So, so that was amazing. And then we got loads of, or I got loads of emails from people all over, from women all over, asking to join the London BCS women's group. And, so I went back to the London, Central London Branch committee and said, 'I've got all these people from all over the world asking if they can join.' And then, it just kind of, became apparent that the best thing to do would be to go to, you know, like, central BCS and say, 'Is it all right if we set up a women's group for the whole of BCS?'

*Yes, exactly, yeah.*

So basically that's what I did. It took me two years to get approval. [laughter] But I got there eventually. And quite a lot of...

*That sounds to me that there were some obstacles that you needed to overcome.*

Yeah, possibly, yeah. [laughs] I wouldn't like to mention any names. But yeah, it took me two years, but I got there eventually.

[25:20]

*But it's some... But again, you, you drew on the strengths that you had overcoming obstacles previously.*

Mm. Yah, I guess...

*And thought, this my objective, I'm going to get there.*

Yeah, it might happen. Yeah, yeah.

*And sort of, carried on till you got there I guess.*

Yeah. Yeah, I guess so. It's all training [laughs] for what was to come. Yeah.

[25:38]

*I think that's, I love that. I was reading one article about you, and, it had a wonderful sort of soundbite in it that said, 'She embodies the traits of a modern leader.'*

Oh great. [laughs]

*Do you, do you see leadership qualities in yourself?*

I guess so. I mean, I guess I must do, because of the things that I've done now, and the fact that... I mean I really love the fact that I somehow, without even knowing that I'm doing it, get people excited about stuff. And I mean, I guess it's because I'm excited about it, and I just say why I'm excited about particular things, you know. So, like, well, you know, the whole Bletchley Park campaign really is what comes to mind. And, yeah, I mean looking back, I'm amazed that all that happened, because I didn't really know what I was doing at all. You know, there was I, like, by that time I was head of department at University of Westminster, and I thought something was wrong, and I, I just, you know, vocalised that and got, well got annoyed about it. Actually I was at an event the other day where we were talking about sort of, taking action and stuff, and I said, 'Well I take action when I get angry.' That's, you know, if I get annoyed.

*OK. You've got that as one of your moral drivers. yeah.*

Yeah, that definitely is a driver, if I'm upset. And the things that make me most angry are things that are unfair, or, you know, sort of like, racism, sexism, homophobia, that

kind of stuff will get me angry very quickly. Whereas I'm an extremely placid extremely person. [laughs] So, but anything like that, any sort of violence.

*See injustices, yeah.*

Injustice, exactly that, exact word. So injustice is a thing that just completely pushes my buttons, get me angry straightaway.

*Yes.*

So, I guess the things that I've probably done are things, you know, are in response to something that's made me angry. So I got angry at Bletchley Park, I got angry about the fact that, you know, the work that was done there is said to have shortened the war by two years. Eleven million people a year were dying. So 22 million lives saved. And yet, you know, the director of Bletchley Park was saying that they were teetering on a financial knife edge and they might have to close.

*Yes.*

And I just thought, well, that's so wrong, they're so wrong, you know, we've got to let everyone know how important Bletchley Park is, and that it needs to be funded so that it's there sort of, in perpetuity. So, yeah, so I got angry about that. And then... That was three years of my life campaigning. [laughter]

*And you saved it and it's all changed enormously.*

Yeah, yeah.

*We mentioned, do have your tea.*

Thank you.

[28:01]

*One of the trips that we took from the Information Technologists to Bletchley Park, I phoned my stepfather from the front, by the tree at the front of Bletchley Park, because he was one of the code breakers there.*

Oh wow.

*And of course, he didn't discuss it at all...*

Yeah, yeah yeah.

*...until they had had the meeting which said you can discuss it, in the late Nineties.*

Yeah.

*And he said, 'Well have a look at that tree, because this is where we use the triangulation point.*

Oh wow.

*Because it wasn't in the house, and it just moved it that little bit, if anyone was seeing anything was going in or out. And you looked at the tree and you could still see where things had been attached.*

Oh my God.

*So, that was, that was really quite interesting.*

Yeah, incredible. Yeah, I mean I just like, it's like, my one dream is to find that a relative of mine worked at Bletchley Park, but I don't think any of them did unfortunately.

*Well also, also, the whole town there, it was so busy for a radio factory.*

Yeah.

*And all the people who have never talked about their job in the radio factory.*

Yeah yeah.

*And no one in the town ever talked about it either.*

No.

*And that is something that fascinates me.*

Yeah, yeah, absolutely.

*That they had a series of lodgers in their houses, without question or anything. It's a, it's a very interesting whole cultural thing that goes around this isn't there.*

Yeah, absolutely, a great sort of psychological study.

*Yes. Absolutely.*

Human behaviour.

[29:23]

*Very much so. Talking of ways that people have described you, the BBC has described you as 'a sophisticated user of social media'.*

OK. So I'm not sophisticated. [laughter] I'm only a sophisticated user of social media. Yeah yeah yeah.

*Absolutely. What tips would you give people for effective use of social media?*

Think about why you're using it. So, you know, with me, I guess, particularly Twitter, I just absolutely love Twitter, I still do. But when I... So when I first went onto Twitter, I looked at it, and I just thought, what is this rubbish? I can't work out

what it is. And so I just left it. I kind of tried to play around for half an hour, and just couldn't see any point or what was really going on. So it wasn't really until I sat next to... Well actually I was in the audience at the Institute of Civil Engineers, and a guy on the stage, a guy called 'WhatleyDude, on Twitter said, 'Who here's on Twitter?' So I put my hand up, and said to the guy sitting next to me, 'It's rubbish, isn't it?' Because like, I had signed up for an account, but I hadn't used it. So this was in 2008. And, and he said, 'No no no. No, it's great. Why do you think it's rubbish?' So we had this conversation. And then he said, 'Have you got it on your phone?' I was like, 'No.' So he said, 'Oh download it onto your phone.' Because, I mean it was still very new, right, 2008. So I downloaded the app, the Tweetie app as it was then, and started tweeting. And so, the guy on the other side of me was on Twitter as well, and he was like, 'No, it's great,' you know, blah blah blah. And so, just that day, it just was a kind of, a revelation to me, because, what I realised was that... So we started tweeting each other, but were all in the same room, like, the guy on the stage, and those two were sitting next to me. But then, there was lunchtime, so we weren't in the same place. And then, there was the sessions in the afternoon. So they weren't in the same session that I was. And so I could see what they were saying on Twitter about the speaker on stage in their room at the conference. And I thought, oh my God, OK, I get it now. I get it.

*I'm now in three conference rooms.*

Yeah, exactly. It was like, I've got my spies around the conference telling me what's going on. And so that just kind of grew and grew and grew. And it very quickly became clear to me that that would be an amazing way to really find people who cared about Bletchley Park, and to start building a community of care I suppose around Bletchley Park. So, I, you know, I set up my profile on Twitter, and I put a link to my blog 'Saving Bletchley Park' which I'd set up, like, six months before. And, I didn't even have to start talking about Bletchley Park, someone contacted me pretty quickly, a guy called Documentally, who had seen the link to my blog, said he was interested in Bletchley Park. And so, ended up chatting to him, meeting up with him, and a couple of his friends. Going to a talk at UCL by Captain Jerry Roberts, who was one of the code breakers at Bletchley Park. So going to that with them, and then the next day going up to Bletchley Park with them, and, just seeing what kind of



happened. Because... So, so @Documentally and his friend @sizemore and @jamillah\_knowles, the three of them had a much bigger following on Twitter than I did, you know, so they had been using it quite a bit. And I was just completely new and didn't quite know what I was doing. So, it kind of gave me a masterclass in how to use Twitter and social media from hanging out with them, seeing what they did. And it also meant that, the people at Bletchley Park, the management, got to see... Because I had been kind of banging on about using social media or something to get the message out there, but with no real experience. So when I took them up there, when we all went up there together, then they saw how these guys were using social media, and I think then, so that kind of opened their eyes to what was achievable.

*What was possible, yeah.*

Yeah. So that, that's the day that we set @bletchleypark up on Twitter, you know, all that kind of stuff. And Sizemore, one of the guys, said that Bletchley Park was the geek mecca, and I just thought, yeah, that is, exactly what it is.

*Absolutely, what a great description.*

Yeah, yeah. So, so in terms of using social media, don't get me started talking about Twitter because I'll go on forever. [laughter] In terms of... So, I had a purpose, I had a real purpose for using Twitter, so it was very clear to me what I wanted to do, which was just to, reach lots of people. And so, using Twitter, that's quite easy, because, even though you've only got 140 characters, you can, just by putting Bletchley Park into the search box at the top of Twitter, I can find everyone that's talking about Bletchley Park across the whole world, and I can start conversations with them. So there's no other way to do that now, you know, Twitter's the only way you can do that still.

*Yes.*

And I realised that quite quickly. And so that's kind of, how I built up the sort of interest in Bletchley Park, by finding people who had mentioned Bletchley Park,

people that were... I put different terms into the search box, find people that are talking about things that are relevant to Bletchley Park, like code breaking and things.

*Yes, exactly. Yes.*

And I just did that every day, every day that I had a spare moment I'd search for people, I'd start chats with them, I'd follow them. And I'd also tell everyone to follow Bletchley Park on Twitter as well, to just kind of like, build that up and get that conversation going, and it just worked so well really, really well.

*And there you are, now you're a sophisticated Twitter user. [laughter]*

Yeah, now I'm sophisticated. So that's not the whole of social media, but...

*Yes.*

[34:36]

So, like, in general, the thing with social media is, be your best self, I would say. If there's one bit of advice, be your best self on social media. So, you know, don't just, when you're feeling depressed just moan about loads of stuff, because, who... You know, it's like having a conversation with your mates. If it's your close mates, then that's fine, but this is not your close mates, this is just lots of people, some you know, some you don't. So that, just, there's no value to anyone complaining about everything. So, you know, I, I try, I am myself on Twitter and all social media, but if I'm not having a good day, then I don't tweet usually, you know, unless I really think there's some particular purpose to doing that.

*Yes, if it's one of the injustices you come across, yeah, that's different.*

Yeah, exactly. Yeah.

*But if it's just one of those days...*

Yeah.

[35:20]

*Well, you've won lots of awards.*

[laughs] Yes.

*For all sorts of things.*

Yeah.

*Including, and this is the one that interested me, you've been listed as one of the top ten women in tech who give back.*

Yes.

*How important is giving back to you?*

Very important. I think it's the, kind of, one of the main things that drives me really. I think, coming from the background that I have, and seeing that I did manage to get where I am today, kind of helped me to realise that, well if I can do that, so can anyone else. You know, I don't really, I really don't think there's anything special about me at all. I just think, because of a sort of, unique combination of circumstances, you know, like we were talking about earlier, so, you know, because I had such difficult times when I was a teenager I think, I think I had a lot of time to think, and I had a lot of time where I was living in injustice, so I think that's where the injustice thing comes from, in an unjust situation. So, you know, that time kind of allowed me to really think about what's important in the world. I didn't have any friends. So I just would do lots of thinking basically. And a lot of it was quite depressed thinking. But it did kind of take me along paths which led me to, kind of feeling, I suppose, very humble and very insignificant, but not in a way that, you know, just in the way that we're all insignificant, or we can all be insignificant if we want to, I suppose.

Yes.

And...

*A small part of a big whole.*

Yeah. Exactly. And, kind of, seeing that, if you can make positive, or kind of coming the conclusion, if you can make a positive impact on the world, then you should do it. And, people don't all get the same opportunities right from the beginning, and I think... I mean I sort of feel sorry in a way for people that have led privileged lives when they're younger, because they just don't, there's no way they can get that insight, I don't think. So I think that's a loss actually, in terms of sort of depth of human emotion and feeling, if you don't ever kind of realise that. So... I forgot what your original question was now. [laughter]

*No, I was just saying, again, how important giving back is. Absolutely.*

Oh yeah, oh absolutely. So, there are so many people that haven't had the chances that I have had, you know, and there are so many people that, with just a little bit of help, could massively change their lives. And so, you know, kind of, coming onto Techmums, that's why I was...

*I was just going to say, you know, the type of projects that you give your time to and you're giving back time to. Let's come on to Techmums. I'm going to keep this running, but, are you feeling a bit hot?*

Yeah yeah, it's warm.

*So I'm going to turn that down a little bit, and just... Maybe it won't be quite so warm.*

[38:05]

*Yes, so Techmums. It's a particularly inspirational project that you're working on, and obviously the whole thing is giving back.*

Yes.

*How did that come about?*

Wow. I guess to start with, so, I ended up having, I don't know, whatever, fifteen years in full-time academia or something, I can't remember how many years, sort of rising up to being head of department, and then, the situation...

[adjusting recording]

[39:22]

So, I... So I had, like, this successful academic career, I was Head of Department. I ended up taking redundancy from a full-time position. I ended up taking redundancy from a full-time position because, the amount of staff in computing was being cut by 50 per cent, but we were going to have to teach the same amount of students. So I thought, as head of department, I don't want to be...

*Work twice as much for the same amount.*

I don't want to be part of making my staff have to work even longer hours when they're already stretched. So I just didn't really want any part of that. So I took redundancy and left. And then, my, well he's my husband now, said, you know, 'Have a rest, [laughs] you've worked so hard for such a long time, why don't you have a rest for a bit, and think about what you want to do.' And, you know, don't just go straight into another sort of, stressful full-time job. So I thought, OK then, that sounds good. So, I started thinking, well what do I want to do? And, throughout my whole career I had felt that technology had kind of got a bad press. You know, in the media, most things to do with technology are always negative, not positive, and I had always seen technology as being this amazing kind of tool that would help us save the planet, empower people, that's how I've, you know, always seen it. So, I wanted to kind of, try and switch that round. So, you know the *Little Britain* sketch, 'Computer Says No'?

*Yeah.*

I don't know if you know that.

*Yeah.*

Yeah, so, what I really wanted to do was to change 'computer says no' to 'computer says yes', really was kind of like, trying to flick that switch.

*Yes.*

So, I thought about that for a while, and, ended up... I also thought we should have computing in schools, and there wasn't any at the time. So I started running workshops with seven-year-old kids, teaching them coding, and app design and stuff, and, because I wasn't...

*So this was on a voluntary basis?*

Yes. So, I wanted to kind of prove that kids could learn coding. Because at the time, Michael Gove was saying that computing was too difficult for anyone under fourteen, and I just thought, that is a load of bollocks. I'm going to, I'm going to... I need to prove that that is wrong to myself even. So, ran these workshops with kids, and, I wanted to get the parents involved too, so invited the parents in at the end. And, so, not every person but in general, when we got the parents in, and looking what the kids were doing with Raspberry Pi and stuff, in general the dads would kind of step in and get on with it, and the mums, not so much. It was kind of like a step in or a step out, you know, and the mums were kind of stepping out. Not everybody, but, you know, I just kind of noticed the people there.

*Yeah, as a general, yeah. Yeah.*

And that started me thinking, you know, maybe if we really, if I really want to change the way people see technology, I need to focus on the people that are stepping out. Because if I can change them, then we can change everything, right.

*Exactly, yeah.*

So, so that started me on the path of thinking about mums. I found out that, the main influencing, positive influencing factors on kids at age eleven in literacy and numeracy in their achievement was their mum's education and the home environment. So I knew about that.

*OK.*

I also knew that, I also found out, or knew, that the main influencing factor on kids' decision about what they study at university was their parents. So that, along with the fact that I'm very sort of, girl power, women in tech, kind of attitude, I wanted to create female role models. So kind of, all of those things together led me to think, why don't I focus on mums, and empowering mums. And also, I know from my own experience, but I didn't realise this at the time, I only realised in hindsight, from my own experience, that doing that maths course at the college completely changed my life, you know. I mean if that hadn't been there, if I hadn't gone to college, I would have had to get a job on minimum wage, right. And so, who knows what might have happened.

*And you might still be doing it.*

[43:15]

Well yeah, no, absolutely, I might still be doing that. I absolutely might. So, you know, I think I kind of, wanted to create that sort of stepping-stone as well for mums out there; I didn't see anything else doing that. So, yeah, so then I put together a programme and called it Techmums, basically. And I wanted it to be a broad range of technology, not just one specific thing. So, I chose the app design stuff that we had done with the kids, with Apps for Good, web design, which I thought was important, a bit of coding in Python, because I think that's really empowering. And, what else? Like staying safe online, a bit of social media of course, couldn't leave that out. And a bit of kind of like, office skills, you know, like emails, documents, spreadsheets, that kind of stuff. So I put all that together into a programme, and got it accredited by

Youth Skills, and... Yeah, so... And then, I was trying to find somewhere to actually roll that out. And then got introduced to a great head teacher at a school in Tower Hamlets, and chatted to him about it. He loved it. And so we piloted it there, and, you know, the rest is history, kind of. [laughs]

[44:25]

*What are your current plans, or ultimate aim, for Techmums?*

Yeah, well so... So, my ultimate aim is to empower all mums round the world with technology. [laughs]

*Yes.*

Yeah. So, I'm not quite there yet. So my intermediate aim is to get to, is to create a million Techmums by 2020. So that's kind of, our current challenge.

*OK. Yes.*

What we've done so far is run in schools, colleges, and like, co-working spaces, in London, Dublin, Nottingham and across Essex. And so, so that has worked really well, but it's not really scalable in the way that we're doing it. So I've been trying to work out how to scale what we're doing, because I want to reach lots of mums. And so, at the moment we're working on putting stuff online so that mums anywhere can, can go through the programme. So we're putting together the Techmums tech taster at the moment, which should go up, hopefully, next month. But it's actually a lot more work than you think it is [laughter], putting education stuff online.

*Putting a million people online, yeah. [laughter] That's probably about as much work as I think it would be. Yes.*

Yeah, so we're working on that at the moment. But, you know, I mean, things, things are kind of starting to take off at the moment, so that's good.

[45:41]



*That's a good thing, yeah. You're in the top ten influential women in IT.*

Yeah.

*There's a certain level of responsibility that that carries with it, isn't it? [laughter]  
How do you use that position of influence to encourage the next generation?*

Mm.

*The Techmums aside, the next generation of women in business, how do you use that?*

Yeah. Well I suppose, I mean, I suppose the main way that I try to help people, encourage people, inspire people, is to keep telling my story, I suppose. And maybe people are fed up with it by now, I don't know, but I just think that, looking back, I can't believe what's happened really. I mean I still can't believe that my life is what it is, I just can't. So, that's great in a way, because it does mean every day I'm like, oh my goodness. [laughter] It all worked out, it all worked out, you know.

[46:33]

*I like that. What brings you the most joy in your life?*

Oh just simple things, like, having a conversation with my kids. Like, you know, walking down the road. I just love, you know, like, even like the walk to the station in the morning, there's a lady that I've seen a couple of times, once actually at night time, so, once we were walking home at night time to our place, and, there was a lady at the bottom of a tree with her mobile phone, shining a light at the bottom of a tree. And we just thought, what's she doing? So I stopped and said, 'Have you lost something, can we help you?' And she was like, 'No, I'm just watering my plants.' [laughs] So she had planted flowers around the bottom of this tree, just on the public road. So I just thought, oh that's so lovely. So every time I walk past that tree, and see the plants growing, growing, and the flowers, it just, that kind of, completely filled me with joy. And then I saw her, maybe about, I don't know, a few months ago, the same lady, planting some flowers on the, just on the road down the hill, like, on my way to the station. And so that made me smile. And then this morning, so this

morning, just walking down to the station, I just noticed all those like, snowdrops, they're like, snowdrops, and I think crocuses she's planted, just on this bit of public, you know...

*Yeah.*

And, just things like that make me extremely happy. So I know it's a really cynical thing, but just, you know, like, seeing the sun shining through the trees. I suppose nature actually, gives me a lot of happiness. So my kids, yeah, my family, nature. And then seeing, seeing particularly women that I know doing well, and progressing, and achieving, you know, that just kind of fills me with joy as well.

[48:11]

*Fabulous. And, goals for the future? What next?*

Well, a million Techmums. [laughs]

*A million Techmums, yeah.*

I, I just, I'm still on that kind of campaign which, I really want to get everyone excited about technology, and I want to reach as many people as possible. So I'm working, I'm still working on other projects to try and make that happen. I think lots of people are really kept back by the fact that they just don't know stuff that they could learn in several hours, you know, things like how to set up your own website for example. So, I'm sort of working on, on putting stuff together to help people to be able to do that.

[48:48]

*Out of all your achievements, is there one key one that you're proudest of?*

Well, I have to say, my OBE. [laughs] Because, well, I still can't believe that happened. It's just like, was that a dream? No, it actually, that actually did happen.

*It really did happen. Talk about it.*

Yeah yeah, absolutely. Well, it's amazing, it's just, it's just so amazing, it's like a fairy, that was a fairy tale day, it seems to me

*Yes.*

And what was quite funny was, so I got another award, which was the Maserati 100, I think it was like, people...

*Please don't tell me they gave you a Maserati.*

Well that's exactly that. It was kind of, the joke of the night. So, no, unfortunately they didn't.

*Oh. [laughs]*

But, yeah, so it was like, entrepreneurs that give back. So, that was last year, sort of, this time last year. So, that kind of came out of the blue, I got invited to this swanky thing in Mayfair. So I went along to that. And of course the joke of the night was, do we get, does everyone get a free Maserati? But I guess there were 100 of us, so the chances of that weren't very high.

*But perhaps one maybe. [laughter]*

So, but that, you know...

*Yeah.*

So, I chatted to the people there from Maserati, and said, 'Obviously we're not going to get a Maserati each, but could I have one for a day?' And, they said, 'Well if you've got a really special occasion.' So I'm so like, OK then, I've got to think of something. Like, thanks very much, took their cards, all swapped cards. And then, you know, like, a couple of weeks later I thought, I'm getting an OBE. [laughter] That's my special occasion. I honestly did not think of it while I was there at all.

*Yeah.*

It just suddenly dawned on me, I'm getting an OBE, that's a special occasion.

*Yeah, a special occasion.*

I'm going to go back and ask Maserati if I can have a car for the day. And so basically, they said yes. [laughs]

*Brilliant. Brilliant.*

So... Also, I'd been trying to get on *Woman's Hour* for a long time, and, just before then, someone had given me someone's contact email who works on *Woman's Hour*. So I just thought, I'm getting an OBE, maybe I can get, this is how to get on *Woman's Hour*. So I emailed them, sort of, quick bit of my story, and, they came back and said yeah. So... And they wanted me on the day I was getting my OBE. But they wanted me live in the studio at ten o'clock, but of course that's when I was getting my OBE, the ceremony was at ten, so it was the same time. So I told them that, so they said, 'Well can you come in and chat to Jenni Murray before? So, can you come in for eight o'clock in the morning?' So I, I'm useless at getting up in the morning, so, I was like, OK. [laughs] So, yeah, so this day, was just incredible. So my sister came down from Essex. And, so one of the hard things was, how do you choose who's going to go with you? Because you get three people to go with you.

*Oh course, yeah.*

So, I sorts of angsted about that for a very long time, but in the end chose my husband, my sister, and my oldest son Sam. Because he was moving to Singapore, and I just thought, if anything else happens, the other kids are here, they can come with me.

*Yeah, exactly. Yeah.*

So, yeah, that was the decision-making process that I came up with in the end. So we had this amazing day where we got picked up, I don't know, it was like, six or half six or something in the morning, at home, Lee[sp?], my husband, and my sister. And we drove up to the BBC at TV Centre. We got picked up by a chauffeur-driven Maserati. [laughs] So it was so funny, like, coming out of the house. Yeah. So I'm used to getting on the bus, or my really crummy old car, so this really swanky car with a chauffeur come to pick us up. So we get in the back, we're going, oh God, can't believe this is happening. [laughs] And, yeah, drive up to BBC, get out, go into the studio, record the interview with Jenni Murray, which was great. And it was lovely to be able to take my husband and my sister along for that as well. I'd kind of got used to, not Jenni Murray but I've got used to going and giving some...

*To giving interviews. Yeah, definitely.*

But you know, not, they, they aren't usually there, coming with me. So I loved taking them with me.

*Yeah.*

We came out from there. Called the chauffeur who brought the car round. [laughs]

*Brilliant, I love it.*

Got in the car, drove to Buckingham Palace. Just like, is this really me? Drove to Buckingham Palace.

*Tweeting as you go.*

Yeah, yeah, absolutely. Tweeting selfies. Picked my son up outside Buckingham Palace, he was waiting there, my son Sam. And then drove in to Buckingham Palace with like, the, whatsanames, guards and...

*Yeah yeah.*

Drove through the arch, sort of into the courtyard. I'm just like, this is just so surreal, it really is just completely crazy. So then we got out. Then got in the queue, so it's back to reality, we're in a queue with loads of people. But you know, just so exciting. And then we went in, and we got split up quite quickly, I had to go one way and they went the other. Then, you know, I went to the bit where we all got told what we had to do, and curtsy, and I was like, oh no, curtsy, what do I do? So, the lady in front of me in the queue actually, as we were sort of going in, said, 'Oh I can show you.' And so she sort of like, curtsied, like, really low, down. I said, 'I don't think my knees can take that. [laughter] I won't get up again.' So she said, 'No, you don't have to go that low, but,' she said, 'I have to do it all the time, every day.' So I was like, 'What do you do?' And she was the Duchess of Cornwall's, I think, whatever you call them.

*Oh, yeah, one of her, the household, yeah.*

Yeah, yeah. Yeah. So, you know, she just did it all the time. So, yeah, so I had a nice chat to her. Yeah, and then, yeah then it actually happened. And I kind of like, Prince Charles pinned the thing on my jacket. And I was just like, I just can't believe this is happening. And, yeah, and then kind of, then it was all over. And then, came back out, had our photos taken. What was great was, my other kids were waiting outside, right outside the gate.

*Oh lovely, good. Good.*

Si asked if they could come in, so we could take photos in the grounds. And they said yes. Oh my God, I was so delighted. So, we've got like, selfies with me, and like, taking selfies, and my sister was there, so that was really great. And then, we got back in the Maserati, and they drove us round the corner for lunch, so that was really cool. And then we had a really swanky lunch. And then the Maserati drove us home, you know, we got home, like, I don't know, like, five o'clock or something in the afternoon.

*Fantastic, what a wonderful day.*

Yeah, it really was. And my love of vehicles, so, on the A3 going home, and, I said to the driver, 'How fast does this car go? [laughs] Has it got really good acceleration?' So then he picked up very quickly that actually I was interested in, in the acceleration of the car. So he said, 'Well I'll show you.' [revving sound] Down the A3. So it was only like, I don't know, twenty seconds or something, but I was just like, oh, it just made my day, that was a great way to end it.

*Absolutely.*

With like, speeding, well not literally speeding, you know...

*Well no, it's got a lot of pull.*

The acceleration. Yeah. It's just incredible. And I was just like, oh, this is just like, the best day ever.

*Fantastic. Absolutely. And how wonderful for that to have happened, after the ups, the downs, the...*

Yeah. Yeah, absolutely.

[55:25]

*The sheer hard work, leading to getting all of that. And very, very well deserved. So if someone, a young person is choosing IT as a career, would you have them advice?*

Yeah, well, it's the best career to choose. But I think the thing is now, it doesn't even have to be... It's like, we called it IT, right, you know, we still call it IT, but, but basically, almost every job we get now has got technology in it in some way. So, you know, it's becoming more and more pervasive, and, you know, I think that, it's sort of, technology skills are the best things to learn, because you can apply them to so many other things. So you could... You know, so like, some people will want to be coders, and that's great, you know, we need software engineers. But I think, everyone should have the opportunity to get excited about and kind of explore technology in

lots of different ways, because, they can then use that in whatever their, their job is really.

*Yeah, that makes a lot of sense.*

Mm.

[56:18]

*We've talked about some positives, some negatives. Have you had financial positives and negatives running through your life as well?*

[laughs] Yeah absolutely. Mainly negatives, most of the time.

*But I'm not hearing that money's very important, or a motivator for you.*

Well I suppose it is in terms of, I'll tell you the big thing with money is. So, when we were, when I was, the hardest time was when I was a student, and, so actually, when I was a student we had a lot less money than when we were on benefits. So... And we didn't get a lot of money on benefits. So I could just about, I could cope on benefits, and I had enough money for food. And, I didn't have to pay, I think I didn't have to pay the rent or something, when we were on Income Support. So, I think I got like, £60 a week for four of us, but you know, it is a while ago. And so, you know, if I was careful, I could pay the bills, and I could buy enough food and everything. When I became a student, I think I got, probably slightly more but not very much more money, but then I had to pay the rent, and I had to... Because there wasn't any housing benefit for students at all. So I had to pay the rent. And basically, meant that I just, we just didn't have enough to live on. And, so, you know, we had various times where dinner would be, mashed potatoes, and a fried egg for the kids, and I didn't even have enough money to have an egg myself. You know, I mean that's just really ridiculous.

*Mhm.*



Ridiculously, really low amount of money. So, you know, we had, I had several years kind of living on that kind of income. So, the best thing, in terms of money, the best thing for me ever was when, when I started my PhD and got part-time teaching, and so, I think my, I think my grant was about £4,000 a year for the four of us, and then, when I started my PhD I think I got, like, £10,000 a year, and started teaching, so it was like, £13,000 a year, or something. So my income kind of like, quadrupled or something.

*Yeah.*

And, as soon as I got that first amount of money in the bank, I went straight up to Marks & Spencer's on Oxford Street, and... And the thing is, so I bought... Because kids are growing, you have to change their clothes anyway, so their clothes were actually OK. Whereas mine, were just like, had holes in my leggings and whatever. So, I went into Marks & Spencer's, and, just bought, like, two whole lots of clothes. Nothing exciting, I just remember it was like, black and brown leggings, and like, a woolly jumper, and some T-shirts. And, I paid for them...

*But at the same time, hugely exciting.*

Oh yeah, no, absolutely. New, new clothes.

*New clothes, yeah.*

Hugely exciting, yeah. And so I went over, I paid for them. So I said, 'Can I go and put these on now?' You know, like, I've just bought them, I don't know why I didn't realise that I could.

*Like people with shoes, yes.*

Yeah, yeah. No, absolutely. So she said, 'Yeah, of course.' So I went back into the changing rooms, put new clothes on. I still remember that feeling now, what that was like.

*Yeah.*

And, and put my old clothes in the bag, and went out into the, onto Oxford Street, over to the nearest bin, and just dumped those clothes in the bin I was just like, yes! New clothes. And it was so amazing. But so, the best feeling is that, and also just being able to pay the bills. Because not being able to pay your rent and not being able to pay the bills is an awful kind of, crippling thing sitting in your mind all the time. It doesn't go away.

*Mm.*

So when I was able to pay the bills, that to me was just, like, the best day ever.

[59:38]

*Fabulous, thank you. What are the best decisions you've made in your IT career?*

*And the converse, is there...*

And the worst. [laughs]

*Yeah.*

[pause] Oh the best decisions. I don't know, because, you don't know what would happen if you had made a different decision.

*That's true, yeah.*

That's quite a hard question to answer. I think... [pause] God, I don't know. That's really hard. [pause]

*That's fine. What about you?*

I've always, once I've made... So I suppose my mental process is, I'll weigh up the options, and decide what I want to do, and do that. And then I just leave everything behind me, I don't even really... Because there's no point, there's no point...

*Yes, because you've passed that point in the journey. Yeah.*

Yeah. And like, looking back, I think, looking back is all right for learning, but looking back is not good to wish that you did, either thing. So actually, I just don't, I don't, I don't do that at all.

*That's good.*

Yeah.

[1:00:37]

*What about you is least documented that you would like people to know?*

Oh God. [pause] [laughs] I don't know, there's so much written about me now. Least documented. [pause] I can't think of anything. [laughter]

*Everything's out there somewhere. On the internet.*

I suppose... No, yes, so OK. I think my whole story, because people know snippets, bits, but kind of like, the whole story and the whole struggle for years and years and years. Yeah, I, I'm sort of, I keep threatening to write my autobiography, and I think I'm going to do that. Because I do think, I do think it is... Even if it just empowers one person to, to go out there and believe they can achieve things, I think that, that it'll be worth it. So, I keep kind of flirting with doing, writing bits and then not writing anything. But yeah, I think, I think that whole story, because it is a long and traumatic story. [laughs]

*So from what we've discussed, and what you've done, and what you've achieved, and the things that you have as goals, I absolutely think that, it needs to come from you for everyone.*

Mm.

*Because, you will probably find more lows come out and more highs that you don't think of in a short interview like this.*

Yeah.

*I think that would be a great idea.*

Mm.

*It's been an absolute pleasure to speak to you.*

Thank you. I've enjoyed it, thank you.

*And thank you for being honest and open, and having such an inspiring conversation.*

Oh, thank you.

*Thank you.*

Thanks very much.

[End of Interview]