A brief introduction - Arpita Chari

Arpita Chari, PhD student, Chalmers IMS

My background
Right after turning 18 I started a bachelors in mechanical engineering. My father is an engineer and my sister is a doctor and I didn't want to do anything with medicine because I was scared of blood and didn't like the smell of the antiseptic. I didn't do computer science or electronics because I found that to be a little bit too abstract. All the labs in mechanical engineering are very hands on, which suited me perfectly. You really see everything working in front of you. I did my masters in the US, in mechanical engineering again, but this time in a more narrow sub-group. After that I worked for a year, I wanted to understand the business side of things, so I got a job as a business data analyser in Singapore. Then I moved back to India and worked for four years in medical technology. Being in healthcare was a way for me to contribute, to help people. I also found the field highly relevant. After that I wanted to work in the industry but I felt that I didn’t have enough knowledge or the skill set required.
The industry is very competitive and so I decided to go back to school, to be a PhD student. The PhD was a good base since you have courses but you also get real work experience in the industry. Industries have a huge impact on environment so that’s what I wanted to work on through a sustainability perspective. I’m now working with Björn Johansson’s group on virtual production and sustainability operations in industry.

**A typical day for me at work**
I’m a very structured person but I feel like i’ve lost my footing a bit since there’s currently no structure. The first year of a PhD is very daunting but right now I try to focus on my courses. I’m trying to take as many courses right now as possible so that I can use those to structure my PhD research topics. But a typical day would normally entail me answering emails and working on my to do list. Then I have courses and supervision, right now we have a lot of master thesis projects coming up. Other things I do at work are reading papers, collaborations with colleagues and have meetings with the industry. Every day is not the same, there’s no typical workday. I would say that describing the different activities I do during a month would be more appropriate.

**What I wanted to be as a child**
I would’ve been an architect, focusing on interior design. I used to dream about design and the very fact that architecture have so many creative outlets. I didn’t take the qualifying exams to do it but I would’ve been an architect if I wasn’t here today.

**Why I became an engineer and what area I work in**
My dad is an engineer and in India there’s also a lot of pressure to be a doctor, an engineer or a lawyer. There’s a lot of respect given to people in these three professions. First I was choosing between financial management and architecture but then I decided to go with my last option, engineering. I don’t regret my choice today, I think being an engineer gives you a good foundation. As an engineer you can do a lot of other things as well. Even if you don’t use your engineering degree it gives you a structured way of thinking. There’s a lot of other skills I’ve learnt through engineering than just being an engineer.

I’m working on sustainability impacts, how the industry impacts the sustainability. I’m trying to work on how sustainability impacts can be improved using digitilized methods such as VR, IOD or cyberphysical systems. Can any of these methods help improving the way operators and managers see the sustainability impacts being measured today?

**Why I chose Chalmers**
Because of its reputation, contacts with the industry and nice work environment. I had already spoken to a couple of PhD student before I signed the contracts so I had a lot of good reviews about it.

My husband was here, he is working for Volvo trucks and moved here in 2017. The decision to come to Sweden was not only for me but for the entire family. The balance between work and family is better here. We were also looking at options in France and India but those were not as good as here. Here they understand that you might have a sick kid or that you have to
go to a parent teacher meeting. You don’t have to choose between work and family, which you shouldn’t have to because they are equally important.

**Three words I associate with Chalmers**
Reputation, Contacts, Work environment