

The Atypical Engineer

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Who is an engineer? The history of engineering has long been a male dominated industry, recruiting those strong in Mathematics and Science. It has been recognized that this has formed a reputation for Engineering to be seen as an exclusive industry and in recent times there has been a drive for more diversity in the industry.

Campaigns to raise awareness about engineering within the nontraditional demographics are only slowly changing the highly skewed industry. And once women and people of colour are attracted into the industry, studies show that retention of them is difficult.

What is an engineer? This presentation aims to explore how we need to redefine what an engineer is to attract and retain more individuals with problem solving potential.

In many developing countries, young women and people of colour study engineering to allow them to improve their family's financial standing or because there are bursaries and scholarships available to study engineering. However, they sometimes find this to be a mis-match to their true strengths or passions. This presentation aims to demonstrate why multi-talented people are a perfect match to engineering and how they can advance the industry further. Apart from mathematics and science, it shows why creativity, business skills, communication, musical, social, family skills are key to being high performing but atypical engineers.

The presentation also talks about the need to leverage these different skills to not only change the perspective on engineering, but extend it. In some countries, the value of the engineering is decreasing and there is a need for more advocacy for engineers, activism against corruption and leadership.

Lastly, the presentation talks about the re-imagined engineer being not one who does a job or a task, but as a lifestyle, where one's skill as an engineer can add and gain value from one's individuality.