

Shrouk El-Attar (she/they)

Electronics Design Engineer at Elvie



“That idea of what an engineer looks like is really out of date and it needs to change [...] people engineer in their heels, people engineer in their dresses, and for me is such a creative field!”

Shrouk is **passionate** about her job and uses their **creativity** to design and test products which improve the quality of life for many people. Her journey into engineering had many barriers because she was an asylum seeker which made her **resilient**.

Like Shrouk, I am:

Passionate

Creative

Resilient

Listen to Shrouk's Inventive podcast episode
inventivepodcast.com



Find out more about Shrouk
nustem.uk/inventive



Sophie Robinson (she/her)
Senior flight dynamics engineer at Vertical Airspace



“One of the good things about engineering is that there are a lot of opportunities where you can use your skillset to make a difference, and make a difference in lots of different fields as well!”

Sophie is **hard-working** as she is helping to create the world's first electric air taxi which will be used to transport people and goods. She needs to be **creative** and **logical** because she is responsible for developing the simulator to train pilots to fly this type of aircraft.

Like Sophie, I am:

Hard-working

Creative

Logical

Listen to Sophie's Inventive podcast episode
inventivepodcast.com



Find out more about Sophie
nustem.uk/inventive



Roma Agrawal (she/her)

Structural engineer, writer and broadcaster



“I don’t think there are that many professions where you get that sense that you’ve made a thing that people are going to interact with, it’s extremely, extremely rewarding!”

Roma **collaborated** with other engineers to ensure that the Shard (an iconic building in London) had solid foundations. She is a good **communicator** and writes children’s books about engineering. She has lived and worked abroad which made her **open-minded**.

Like Roma, I am:

Collaborative

Open-minded

Communicator

Listen to Roma's Inventive podcast episode
inventivepodcast.com



Find out more about Roma
nustem.uk/inventive



Askwar Hilonga (he/him)

Chemical Engineer & Director of Gongali Model



“It pays more to use our education, to use our innovation, our engineering endeavours and successes to solve the real challenges in our local communities”

Hilonga is **imaginative** and engineered a water filter to bring clean water to millions of people across Africa. He is **observant** and identifies contaminants in water sample. He is also **tenacious** while he manipulates the filter materials used to trap contaminants.

Like Hilonga, I am:

Imaginative

Tenacious

Observant

Listen to Hilonga's Inventive podcast episode
inventivepodcast.com



Find out more about Hilonga
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Greg Bowie (he/him)
Manufacturing Engineer at Invibio



“A much more valuable way of learning is getting your hands stuck in [...] things won’t go as you plan, but as long you don’t get defeated by that and just learn from it, then go on and improve things. ”

Greg's **creativity** and **patience** helps him to use innovative materials to make trauma plates to heal broken bones. He started engineering as an apprentice and quickly learnt how to be **resilient** when things didn't work first time!

Like Greg, I am:

Creative

Patient

Resilient

Listen to Greg's Inventive podcast episode
inventivepodcast.com



Find out more about Greg
nustem.uk/inventive



Ruth Amos (she/her)
Inventor & entrepreneur



“There are so many young people out there who think they are not clever enough to be an engineer, that they don’t come from the right places, that engineers don’t look like them, and they are wrong! Engineering has a place for everyone!”

Ruth’s **imagination** and **resilience** helped her to invent a tool to help people with mobility issues to use stairs more easily. She is now **committed** to bringing children’s inventions to life and showing them what they have in common with engineers.

Like Ruth, I am:

Committed

Imaginative

Resilient

Listen to Ruth's Inventive podcast episode
inventivepodcast.com



Find out more about Ruth
nustem.uk/inventive



Sian Cleaver (she/her)
Spacecraft engineer at Airbus



“Going back [to the Moon], it’s going to be inspiring for a whole new cohort of people. A large proportion of the world will be seeing this for the first time and I hope that will inspire young people and do wonders for the world of engineering!”

Sian is **logical** and **organised** as she ensures that the next generation of astronauts will have the support needed for a safe journey back to the Moon. Being a spacecraft engineer in the space industry means that Sian is **open-minded** as she works with colleagues from all over the world.

Like Sian, I am:

Logical

Organised

Open-minded

Listen to Sian's Inventive podcast episode
inventivepodcast.com



Find out more about Sian
nustem.uk/inventive



Josh Macabuag (he/him)
Search & Rescue Engineer



“You are always learning and you are always challenging your levels of knowledge ... engineering is so intertwined with the people that you are working with and the communities that you are working with ...”

As a search and rescue engineer Josh needs to be **observant** and **resilient** to find safe ways to rescue people trapped in collapsed buildings. He doesn't work alone but **collaborates** with others, because teamwork is essential in a natural disaster rescue zone.

Like Josh, I am:

Observant

Resilient

Collaborative

Listen to Josh's Inventive podcast episode
inventivepodcast.com



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Enass Abo-Hamed (she/her)
CEO of H2GO Power & Entrepreneur



“One of the things I find fascinating about engineering is that the greatest inventions of our lifetime are engineering inventions and they all come to solve a problem”

Enass is an activist engineer who works **passionately** to address climate change. It took a lot of **hard-work** to start her own company when she invented an **imaginative** way to capture and store hydrogen as a clean source of energy.

Like Enass, I am:

Passionate

Hard-working

Imaginative

Listen to Enass's Inventive podcast episode
inventivepodcast.com



Find out more about Enass
nustem.uk/inventive



Manjot Chana (he/him)

Senior System Integration Engineer at H2GO Power



“I’ve always had a massive affinity for solving problems, for me life itself is a series of micro problems which need to be solved or optimized”

Manjot’s early **curiosity** about robots led him to do a degree apprenticeship in automotive engineering. Being **logical** and **organised** at work helps him to link together different technologies used to harvest and store hydrogen as a clean source of energy.

Like Manjot, I am:

Curious

Logical

Organised

Listen to Manjot's Inventive podcast episode
inventivepodcast.com



Find out more about Manjot
nustem.uk/inventive



Larissa Suzuki (she/her)
Head of AI and Data at Google Cloud



“I think there are a lot of transferability in skills from one area to another, and that is why I find engineering a very exciting career because we can be curious and inventive at all times”

Larissa believes that being **collaborative** and sharing data will enhance the quality of life of people living in smart cities. She is also **curious** about the development of an interplanetary internet and wants to use Artificial Intelligence **creatively** to support future space missions.

Like Larissa, I am:

Collaborative

Curious

Creative

Listen to Larissa's Inventive podcast episode
inventivepodcast.com



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Jack Haworth (he/him)
Electrical engineer graduate at Sellafield



“Once I actually understood engineering ... I thought it’s like a perfect mix of practicality and theory. What you are learning, you can see it applied to real life applications.”

Jack **collaborates** with others, creating robots that can work in extreme environments. Being **observant** allows him to better design robotic components. Jack is **passionate** about raising awareness of different routes into engineering, especially the benefits of apprenticeships.

Like Jack, I am:

Collaborative

Observant

Passionate

Listen to Jack's Inventive podcast episode
inventivepodcast.com



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