A letter from Sami Raines, Senior Software Engineer from Roo-ver Mission

Dear students,

My name's Sami – I'm one of the engineers helping build Australia's first lunar rover, which is named Roo-ver. This is an Australian Space Agency-funded project that will see Roo-ver travel to the Moon on a NASA mission around the end of the decade.

I'm a Senior Software Engineer for the Roo-ver Mission, working for a company called EPE as part of the ELO2 Consortium. It's my job to help create the internal control systems that will make Roo-ver successfully drive on the Moon and communicate back to its operators back here in Australia – 384,000 kilometres away! One of my favourite parts of my job so far has been to help choose the cameras that will allow Roo-ver – and all of us watching from Earth – to see the terrain its covering. Some of the first images from Roo-ver on the Moon will be using my cameras!



Engineering is an exciting career, and challenging too, and I still learn new things every day. Here's some advice I'd give to someone considering engineering – or similar careers – for their future job:

- You do have to study hard to become an engineer, and some subjects will be tricky. The key is
 figuring out how you best learn that subject or topic. Figure out if you prefer learning in video
 format, or reading for example, and make sure to add that into the method you're being taught
 – it will help it stick and you'll be amazed at how much you can learn by engaging in the right
 format!
- It's okay, and normal, to not understand things like maths initially, but your brain is an amazing thing keeping on going, rather than giving up, is the most important part. Make sure you ask questions and it's okay to ask the question again if something isn't making sense! I can guarantee you won't be the only one who doesn't get it.
- Be open to opportunities that might not initially seem like they're part of the path. Being exposed to new skills and experience help you develop as a person more generally, and they can also end up helping your career path in a way you mightn't have realised initially.
- Be curious, be enthusiastic, and be willing to put in the hard work. With those three things in place, you'll have a world of opportunities open to you. I wish you all the best of luck in your studies and contemplating future careers. Be sure to follow along with what we're doing on the Roo-ver Mission at our website (roovermission.com.au) or by following us on Instagram there are loads of opportunities to get involved!

Sami Raines

Senior Software Engineer

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