



Juno Phan

About me

I am Juno, an Electrical and Electronic Engineering (EEE) student at the University of Warwick!

My inspiration

I never really expected to become an engineer, as I found Physics quite challenging growing up. That was until my sixth-form Physics teacher, Jason, completely changed my perspective (and possibly my whole life trajectory). He showed me that Physics could be fun when taught the right way. That was when **I started questioning the physical mechanisms behind the everyday objects**. As I discovered that all of these things exist thanks to the brilliant minds of engineers around the world, I was inspired to pursue engineering. Although, I still wasn't sure yet which field to choose.

I applied to Warwick because the engineering programme offers a general first year, which was perfect for someone like me. My decision to specialise in EEE was best described as "slowburn" - it came after a year of trial and error, working on projects across multiple disciplines and gradually discovering what interested me most.



My strengths

One of my strengths is my ability to stay calm in stressful situations. This helps me handle high-pressure moments with ease, especially before interviews or exams, and deal with unexpected situations without panicking (even when I probably should be a little worried!).

My manager at Renesas Electronics, where I completed an internship, was actually the first person to point this out. It came after an incident when I had to call him after hours to explain that I had falsely triggered the building's motion-sensor security alarm by staying late at the office. He was particularly surprised at how calm and composed I sounded over the phone, almost as if there weren't blaring alarms going off around me. Safe to say, I made a memorable impression!

Fascinating tech

Noise cancelling (NC) earphones are the first thing that come to mind! I was quite sceptical before trying my first pair, but they have since then become an essential item in my daily life. I am quite sensitive to loud environments and can often at times feel overstimulated by background noise. I use my headphones to listen to music everyday, but sometimes I simply just wear them with NC turned on and no music, "muting" the world when I need of a peace of mind.

The concept behind it is simple yet very clever, where the noise frequencies picked up by the microphone was processed rapidly to generate an inverse waveform that basically cancels each other out in real time! To me, **this is a great example of how analogue and digital electronics come together** to create something so small, practical, and yet powerful (this also proves that sometimes the best technology is the kind that lets you hear absolutely nothing at all!)

What excites me about the future

The potential for 3D-printed electronics. We have already seen how 3D printing has transformed rapid prototyping and made it so widely accessible, almost creating a new wave of at-home makers who use their creativity to the fullest. If similar progress can be made for electronics, **printing functional components or circuitry could be a very exciting development**. This would open new doors for fully customisable prototypes, like mechanical objects with embedded circuitry, custom antennas, or even personalised wearable health sensors for at-home healthcare diagnosis.

We still have a long way to go before 3D-printed electronics become a practical reality, especially when most conductive ink currently on the market are still flawed compared to traditional manufacturing methods. Nonetheless, I find it fascinating to think that there is a future where building electronics could become flexible, personal, and spark a lot of fun!



My aspirations

To be honest, I am still at the “exploring” stage in my career, as are lots of my fellow engineering student friends. **My aspiration is simple: keep on trying (and failing!) new things until I figure out the direction that does it for me.**

So far, I have completed two internships in vastly different areas: one in semiconductor IC packaging and another in automotive electrical system design. These experiences helped me learn a lot about myself: what I enjoy, what I don't enjoy quite as much, and where I can see myself growing in the future.

More recently, I discovered RF engineering through my third-year dissertation project. **I found the field fascinating, slightly magical, and at times conceptually challenging** (which, in engineering terms, usually means it's worth pursuing!).

For this I decided to step outside my comfort zone and explore it further by taking on a year-long placement with the RF team at CSA Catapult.



My advice would be to treat it as a chance to explore. Electrical and Electronics Engineering is a massive field so it is completely normal if you're not sure what you like from the start. My approach has been to sign up for anything that sounds even just “mildly interesting”.

Looking back, I've found that being open to different experiences - internships, projects, and placements in very different areas - has really helped me narrow down my options. Some areas will quickly become an immediate “No!”, some will sit in the “Maybe” category. And I trust that somewhere along the way, you might come across something that really clicks, whether that's a specific area of engineering or even a different path altogether.

The key is not to see the “No!” moments as failures. They're just as valuable as sometimes learning what you don't enjoy is the fastest way to figure out what you do.