

Sara Pellegrini

About me

I am the **Imaging Technology Scout** at STMicroelectronics. In this role, I go and find startup companies that work on new ideas that could be interesting for my company.

I started in ST 20 years ago as an engineer that measured all our pixels and then became the manager of the pixel technology development. In this role, I was in charge of making sure the pixels in our cameras were as good as we wanted them to be.

I graduated in Electronic Engineering from Politecnico di Milano in 1999 and then received my PhD in Physics from Heriot-Watt University in 2006.



My inspiration

When I was 16 years old, I saw for the first time the circuit board with all the transistors at the back of an amplifier. I found it fascinating and **I thought it would be great to be able to build such a complex circuit.**

My strengths

I love solving problems and addressing challenges.

When I see something that doesn't look quite right, I always find a way to try and resolve it. I have a good ability to vision what things should be like and then I operate myself to ensure we get there.

Fascinating tech

I am always amazed when I see the Apple FaceID working and being copied by other mobile phone manufacturers.

I was part of the team that developed the first prototype, and it was such a great achievement! It was a big challenge, but working together with a very strong team we managed to overcome all the technological challenges that we found on the way and produced something truly innovative.

What excites me about the future

Innovation is continuous and when you're working in this industry there is always something new coming up. **It's great being part of the innovation** that will be in our houses in 10 years' time, and being able to see what's coming.

We are depending on sensors more and more, and being part of this evolution is super exciting.

My aspirations

I started as a technology scout in July 2025, and **I am really looking forward to see what will become of me in this role.** There is a large scope for evolving and a lot of networking to be done outside my office.

The long term plan? I don't have one yet, as I'm quite focused on the now.



If you think electronics or technology is fascinating, go for it! Many people say electronics is a difficult thing to study, but so are many other topics. If you are passionate about electronics and you can visualise yourself working on technology, then you will have enough drive to overcome all the obstacles that are in your way.



Dr Carol Marsh OBE

About me

I am an Electronics Engineer with over 40 years' experience in digital electronics and satellite systems. As **Engineering Director** at **Celestia UK**, I have led the development of the Celestia Gateway, a new technology transforming satellite communications.

My inspiration

At school, I enjoyed maths and originally planned to become a maths teacher. In my final year, being introduced to computers and programming changed everything, showing me **how mathematics could be used to create real, working systems** and leading me to study Electrical and Electronic Engineering.

Discovering logic gates during my studies was the defining moment - seeing **how simple building blocks could create complex systems** is when I knew electronics was where I belonged.



My strengths

I'm a strong problem solver who enjoys breaking complex ideas into simple steps. I'm curious about how things work and enjoy learning as technology changes.

I'm also a good communicator and team player, and I enjoy supporting and mentoring others.

Fascinating tech

Two technologies that have fascinated me during my career are Field-Programmable Gate Arrays (FPGAs) and Low Earth Orbit satellites.

FPGAs are re-programmable electronic chips that have evolved from performing simple tasks to **running entire systems on a single device**. Low Earth Orbit satellites are transforming global communications, with the goal of **connecting people everywhere on Earth**.

What excites me about the future

Electronics is changing faster than ever, with a growing impact on healthcare, transport, and global communications. What excites me most is not just the technology, but the opportunity for **a more diverse and inclusive generation of engineers to shape what comes next**.

My aspirations

As I near the later stages of my career, I would love to see Celestia's Gateway become a successful product that changes the way we communicate with satellites for years to come. **Knowing that technology I've helped develop could have a lasting impact** - and be built on by the next generation of engineers - is incredibly rewarding.



Be curious and don't worry if things feel challenging at first — that's part of learning. Focus on the basics, ask questions, and get hands-on experience whenever you can.

Engineering is about problem solving, and a career in Electronics can take you in directions you might never expect — that's one of the most exciting parts.



Kessia John

About me

I am a **second-year undergraduate** at the **University of Cambridge** studying General Engineering, with plans to specialise in Electronic Engineering next year. I am a UKESF Scholar with Siemens EDA and have prior experience at Renesas Electronics, where I worked as a hardware design engineer intern.

My inspiration

When I was in Year 12, I attended an Apple “Insight into Electronics” event where we explored chip design and were shown a full semiconductor wafer covered in individual chips. **It was genuinely one of the coolest things I had ever seen.**

Learning about how much detail goes into designing a single piece of silicon and how it ends up inside almost every electronic device we use day to day made me realise I wanted to study Electronic Engineering.



My strengths

I’m always keen to learn new things and try different approaches, whether that’s picking up a new technical skill or exploring unfamiliar areas of engineering.

I especially enjoy tackling problems that don’t have a clear or obvious solution.

Fascinating tech

I think it’s interesting to see how wearable devices have become part of everyday life over the past 15 years. Seeing electronics shrink to fit into something people can wear all day, while still delivering meaningful health and activity insights, feels like a real achievement for the field. What started as simple fitness tracking has grown into devices that can monitor heart rhythms, detect falls, and even alert emergency services, **helping to save lives and have a real impact on people.**

What excites me about the future

I’m excited by how electronics will continue to shape areas such as healthcare, sustainability, and computing over the coming years as devices become more intelligent and interconnected.

Being part of **an industry that sits at the centre of so much innovation and progress** really motivates my personal journey.

My aspirations

I want to continue growing my skillset in hardware design through hands-on experience in industry, as well as by making use of the wide range of online resources available to learn and experiment independently. I’m excited to keep developing both technically and professionally, while **working on meaningful projects that have real-world impact.**



Don’t worry if you don’t understand everything straight away, electronics really is a subject that rewards persistence and curiosity. If you focus on getting the basics down and try things out hands-on where you can, slowly but surely things will start to make sense.



Jo Gibbins

About me

I joined **CML Microcircuits** in 2003 after graduating from the University of Bath with a First Class BEng in Electronics and Communication Engineering.

I began my career as an RF Design Engineer and, over the years, have built extensive Radio Frequency (RF) systems expertise through involvement in a wide range of projects. I have contributed to some of CML's most successful products over the past 20 years—an experience that has been both rewarding and fulfilling.

The variety of work and the people I've worked with are the two main reasons I've remained with CML for more than two decades!

My career progression within the company has been equally rewarding. I became Systems Engineering Manager in 2020 and was appointed **Head of Engineering** in 2021. In this role, my focus is on fostering collaboration, encouraging innovation, and strengthening our technical capabilities across the UK engineering teams.

I have a genuine passion for engineering and truly enjoy the work I do. I'm committed to helping inspire the next generation to discover that same enthusiasm and pursue careers in engineering.



My strengths

I love problem-solving, whether it's completing a Sudoku for fun or tackling a complex technical challenge at work.

Throughout my education and career, I've learned the value of asking questions and embracing mistakes as part of the learning process.

I'm also passionate about sport, both playing and watching, and I always try to bring a collaborative, team-focused approach to my work. As you progress through different stages in life the best resources are the people around you, so embrace learning from others!

My inspiration

From an early age, I was driven by **a curiosity to understand how things worked and how to fix them when they didn't.** At school, I quickly realised that engineering was the right path for me, with Electronics and Electrical Engineering standing out as the area that most captured my interest. I particularly enjoyed taking things apart and building them, which strengthened my passion.

Fascinating tech

The **rapid evolution of mobile technology and the way we communicate has been remarkable** to witness. It's incredible to think that devices once limited to calls and basic text messages have transformed into powerful, pocket-sized computers that support high-quality video calls, social media, and advanced photography. The pace of this innovation—and how central these devices have become to everyday life—is truly astonishing!

What excites me about the future

Innovation in electronics—particularly in wireless communications—is **advancing at an extraordinary pace.** As demand for high-quality video streaming and reliable data transfer continues to grow, the industry is challenged to deliver market-leading performance and functionality. This constant pressure drives engineers to develop new techniques, refine existing technologies, and push the boundaries of what's possible. It's **an exciting environment that offers significant opportunities for fresh ideas** and new perspectives from the next generation of engineers.

My aspirations

Over the coming year, we have several exciting projects to deliver, and I'm looking forward to seeing them develop. The additional workload has enabled us to grow our team, which has been encouraging, but it has also highlighted the increasing need for more young people to pursue careers in engineering.

Alongside my day-to-day responsibilities, **I want to explore ways we as a company can inspire and encourage the next generation to consider engineering roles.**



My advice would be to gain as much hands-on experience with electronics as possible. Today, there are many affordable starter kits that allow you to build simple projects at home, and these early experiments can quickly become genuinely useful—such as creating a DIY smart-home system using a Raspberry Pi or Arduino.

Electronics is far more accessible than it used to be, and these practical experiences are not only enjoyable but can also help you discover which areas you might want to pursue in your studies and future career, whether that's circuit design, software engineering, semiconductor development, or many many others.



UK Electronics
Skills Foundation

Rachel Baker

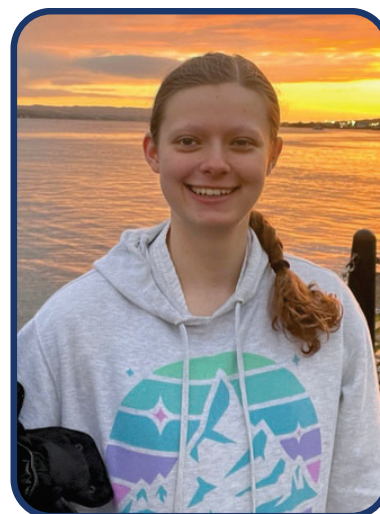
About me

I'm in the penultimate year of my **MEng in Electronics and Computer Engineering** at **Newcastle University**. I am a UKESF Scholar, sponsored by **Nordson**, and am excited to return for my second internship there later this year.

My inspiration

I first became interested in Electronics when, just before Sixth Form, I realised I wanted to do something more physically practical than Computer Science. This led me to explore engineering options where I chose Electronics as I thought it would be the best of both worlds.

The combination of problem solving, design, maths, programming, and practical lab-work really appealed to me.



My strengths

My strengths are my passion for Electronics and helping other students at university through mentoring and leadership roles.

Fascinating tech

Over the past 15 years, I think the general **development of the semiconductor industry has been fascinating**. It's a really exciting time for the industry which is why I chose it as the pathway in my degree.

What excites me about the future

What excites me about the future of Electronics is that **anything could happen**. There is such a vast array of industries Electronics is utilised in and it's inspiring to see regular new developments everywhere.

My aspirations

In the future, **my primary goal is to become a Chartered Engineer (CEng)**. This has always been a goal of mine since becoming interested in engineering, and the development pathway towards it is something I aspire to follow.



My advice to someone who wants to start a degree in Electronics, or a similar subject would be to just go for it! There are so many areas across the industry which are constantly developing and need passionate engineers like you to do so!



Anna Gilbert

About me

I am a **Fellow & Chartered Design Engineering Director** at **Cadence Design Systems**, with 24+ years experience in delivering solutions for complex, multi disciplined and multi site projects in the semiconductor and consumer electronics industry.

I have worked on semiconductor chips for everything from an xbox to cars!

I graduated with a first class honours degree in Electrical Engineering including Power Electronics from The University of Wales, Bangor.

My inspiration

I was always good at Physics, Chemistry and Maths so engineering was a natural fit. I went to an all-girls grammar school and I remember back then doctors, or at a push aeronautical engineers, were acceptable career options.

Electrical and Electronic Engineering was not looked on favourably. I think my mind was made up when my maths teacher told me I couldn't be an engineer - I set out to prove him very wrong!



My strengths

I am very motivated and energetic, even after nearly 25 years in the industry!

I always push myself, thriving off new challenges and I set high standards for myself and my team.

I am also a passionate field hockey player and coach.

Fascinating tech

The advancement of technology, from the technology nodes in the fabrication process to driverless vehicles and now the world of artificial intelligence.

A few years ago, as part of the IET and IMechE organisations I was involved in organising a schools event that saw **Richard Browning flying with his gravity jet pack around the grounds of Salisbury Cathedral!** I will never forget the 500 teenagers faces!

What excites me about the future

The way humans mindset will change with AI. We will have to think completely differently and all those boring repetitive jobs will be removed from the daily grind.

I am a mum to 3 boys and watching them learn and grow inspires me everyday.

My aspirations

I want to keep making a difference. I continue to aspire to one day be honoured with an MBE!



I think if you strive to continually better yourself, professional registration is an important process in helping you assess your competencies and look at where you can improve. The process forces you to regularly self-evaluate so you can keep developing yourself professionally.

I would urge anyone to get a mentor, these are invaluable throughout any career.

I also recommend giving back to the community in any form. Whilst doing this in an engineering capacity it is really important to make connections and inspire the next generation. Voluntary work brings with it different skills that will help shape your path!



Swetha Lakshminarayanan

About me

I am a **Mixed-signal IC Design Engineer** with three years of industry experience, currently working at **MintNeuro**, with a passion for designing electronics for neural interfaces.

My inspiration

I chose to pursue a career in electronics because **I love seeing how theory comes to life in the real world**. Studying electronics showed me how abstract mathematical and electrical concepts can be used to develop real devices that improve people's lives. I was drawn to integrated circuit design because it combines problem-solving with the challenge of optimizing designs under real-world constraints.

Fascinating tech

One technological development I find fascinating is the progress in neural interfaces over the past 15 years. Advancements in low-power mixed-signal ICs now make it possible to build devices that can both record neural activity and deliver targeted stimulation in real time. These technologies are being used in brain-computer interfaces and neurostimulation therapies, making long-term, implantable solutions more practical and effective. Seeing how **careful circuit design directly enables these life-changing systems has been especially inspiring** to me.



My strengths

My strengths include *analytical thinking and problem-solving, especially in mixed-signal circuit design. I enjoy understanding complex systems and breaking problems into manageable pieces.*

I'm curious, detail-oriented, and persistent, which helps when I'm trying to understand or debug a design. I also value collaboration and clear communication, and enjoy learning from people with different experiences and perspectives.

What excites me about the future

What excites me most about the future of semiconductors is their **growing role in healthcare, sustainability, and human-centred technology**.

By leveraging technologies already available in smartphones and computers to power biomedical devices such as neural interfaces, meaningful advancements can be made to improve people's quality of life. I'm excited about the potential of electronics in biomedical applications and being part of this evolution.

My aspirations

My aspiration is to continue growing as a mixed-signal IC designer by working on technically challenging projects with real-world impact. In the long term, **I would like to contribute significantly to innovative technologies in healthcare**, continue developing my technical knowledge, and support and mentor others entering the field.



My advice to someone who wants to start an EEE or related degree would be to take it one step at a time and not be too hard on yourself if things feel difficult at first. It is challenging but highly rewarding. Stay curious, get hands-on where you can, and don't be afraid to ask questions!

Vasiliki Xiradaki

About me

I graduated from the University of Birmingham in 2024 with a first-class degree in Electronic and Electrical Engineering and I am currently working as a **Digital IC Design Engineer** at **EnSilica**. I have more than 3 years of experience working in the semiconductor industry and have been the recipient of several technical awards and scholarships.

My inspiration

During university I secured a placement year with an IC design company, EnSilica. **I was able to experience first hand how innovation in electronics turns into real-world impact.** I was fascinated by the projects I was working on, which included a beam forming IC for satellite communications, and I was also constantly inspired and encouraged by my colleagues to expand my knowledge in the field.

What stood out to me the most was how unlike some other disciplines, in electronics you can design, build, test and see something working in your hands. That **combination of theory, creativity, and tangible results** made it clear that this is the right path for me.



My strengths

I am strong in analytical thinking and problem solving skills which are essential for the pursuit of a career in engineering. I am curious by nature, and quite stubborn when it comes to troubleshooting. I like asking "why?" and "what if?" and very rarely give up searching for better solutions if I know they can be achieved.

Beyond technical skills, I value collaboration and communication. Being able to work within a team, and explain complex ideas clearly are just as important as technical skills.

Fascinating tech

The rapid advancement of semiconductor technology has been extraordinary. One example that fascinates me is the rise of Low Earth Orbit (LEO) satellite constellations for global broadband. In the past decade, we've seen the deployment of large-scale satellite networks that use sophisticated electronic systems and chips, which fundamentally change how sat-coms works. This is only one example of how electronics can literally connect the world, by bringing internet access to remote locations, and enabling connectivity for global communications.

What excites me about the future

What excites me about the future of semiconductors is their role in sustainability. More efficient power electronics and RF systems don't just improve performance — they reduce energy consumption at scale. **It's exciting to know that engineers can directly contribute to building a more connected and more sustainable world.**

My aspirations

I would like to continue expanding my technical skills in IC design in order to be able to **contribute to technologies that have a tangible global impact.** I am also interested in eventually taking on technical leadership roles, where I can both drive innovation and support the development of young engineers, just as I was supported at the start of my career.



Be curious and be patient with yourself. Electronics can feel challenging at first because it combines maths, physics, programming, and practical skills. Try to get hands-on experience as early as possible. Build small projects, join university societies, apply for placements or internships, and don't be afraid to ask questions.

Most importantly, don't be discouraged if something doesn't work the first time. Troubleshooting is not a sign you're bad at engineering, it is engineering. Persistence, curiosity, and willingness to learn will take you much further than knowing everything at the start.



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.



Nishika Chetty

About me

I am a **Firmware Engineer** at **Renesas Electronics**, specialising in secure firmware development for advanced microprocessors used in industrial and AI applications. I hold an MEng(Hons) degree in Electronic Engineering and Computer Science. As a passionate STEM Ambassador, I have inspired and empowered thousands of young people to pursue careers in STEM.

My inspiration

I was drawn to Space and Robotics from a very young age. As a child, I dreamed of becoming an astronaut, and as I grew older, that dream gradually evolved into an aspiration to become a robotics engineer. Curious about the path to that goal, one day I decided to google what the top robotics engineers in the world studied, and I noticed that they all had a degree in Electronics. Therefore, I chose to study Electronics. My degree in Electronics and Computer Science was a perfect fit for me, as **it brings together 3 of my favourite subjects, Physics, Maths, and Coding.**



My strengths

My strengths are coding and communication.

I have been passionate about coding since year 10. I love the logical reasoning and problem solving aspects of coding. Over the years, I have worked with a wide range of programming languages, including Java, Python, HTML, CSS, JavaScript, YAML, Shell scripting, C, and even Assembly!

Fascinating tech

I am truly fascinated by the way **technology can be used to create meaningful impact for everyone on this planet.** In recent years, the rapid advancement of robotics for socially and environmentally beneficial applications has been really inspiring for me. I have seen startups develop robots that clean water bodies, helping combat plastic pollution and create healthier ecosystems for aquatic life.

During my final year at university, I built a prototype of a smart bin that automatically segregates waste. Through this project, I learnt about organisations and companies that use robotics and mechatronics to improve waste management—both at the source, through automated sorting bins, and at the final stage in recycling centres.

I am also intrigued by emerging areas such as soft robotics and their potential applications in space exploration, as well as the use of robotics in disaster response and evacuation, where robots can reduce risk and save human lives.

These developments truly reinforce my belief that technology can be used to solve some of the world's biggest challenges!

What excites me about the future

Electronics is the backbone of technology, and it is really exciting to see how it is **driving progress in fields such as AI, robotics, space exploration and renewable energy.**

Semiconductor chips are becoming smaller, faster and more power efficient enabling smarter sensors, better response time, improved decision making in human computer interaction systems, and more portable technologies. While energy efficient electronics systems provide more sustainable solutions, advances in performance and reliability allow complex systems to operate safely.

I am also excited by the potential of electronics in enabling the emerging field of quantum computing. Problems that are currently impossible for our computers to solve, might be possible in the near future, with applications such as advanced cryptography. This is of particular interest to me as I work on secure firmware and cryptography plays a critical role in firmware security. I am quite keen to help contribute to the development of these technologies.

My aspirations

My aspiration is to **lead the development of technologies that make a meaningful impact on people's lives**. I want to use technology to address global challenges, such as combating climate change, and to contribute to the exploration of space. **I still hold onto my childhood dream of becoming an astronaut**, and I may even pursue that path someday.

In addition to technological impact, I am **passionate about fostering a diverse and inclusive engineering workforce** and making technology accessible to everyone. I believe that creating opportunities for people from all backgrounds to participate in shaping the future of technology is just as important as the innovations themselves.



My strengths...

Communication is a relatively new strength and passion for me. I was once a timid and quiet little girl who never imagined that communication could become one of my strongest skills. However, when I decided that I wanted to achieve something meaningful, I deliberately pushed myself beyond my comfort zone. I began volunteering for speaking opportunities and sharing my story with others—an effort that eventually led to an invitation to appear as a guest on BBC Radio!



My advice to anyone who is considering studying Electronics or who wants to become a Firmware engineer is to learn to code, learn prompt engineering, push beyond your comfort zone, and always be true to yourself.

Even if coding is not your primary job, learning to code helps develop problem solving skills, which are essential in any technical role.

AI is not going to take our jobs, however, we can use AI to be better at our jobs. Therefore, learn to write effective prompts and develop your prompt engineering skills. This is something I practice myself!

Push yourself beyond your comfort zone as long as the end goal is something you truly wish to pursue. You will often surprise yourself!

There might be hurdles along the way but if you know that you are being true to yourself by doing something you are passionate about then you will find the resilience to overcome them.



Megan Goodsell

About me

I am a **Senior Engineering Process Manager** at **Sky**, responsible for developing and improving processes that support the delivery of new products.

I first joined Sky as a UKESF Scholar in 2019, later completing two internships and spending three years as a Hardware Engineer before moving into engineering process management. I graduated with a degree in Electrical and Electronic Engineering from the University of Southampton.

My inspiration

From a young age, **I was fascinated by how things worked** - I was always taking things apart just to understand what was happening inside. At school, we had a careers talk where someone mentioned electronic engineering, and it was the first time it really occurred to me that it could be a career option. **I enjoyed maths and physics, so it felt like a natural fit.**

But, the real turning point was when someone told me engineering was 'a boy's job' and 'not for girls'. Hearing that made me even more determined, and it confirmed for me that this was exactly the path I wanted to follow.



My strengths

One of my biggest strengths is **problem-solving**. I'm not afraid to ask the questions others might hesitate over, because getting to the true root cause is the only way to solve a problem properly. Combined with my ability to see the bigger picture, this allows me to work effectively on high-level, cross-departmental projects.

I am also incredibly determined - sometimes to a fault! Give me a task and I'll get it done. That drive and persistence have been key to helping me progress in my career.

Fascinating tech

AI has always fascinated me, though for a long time I saw it as a bit of a 'dark art'. But as AI has developed at such a rapid pace, I've invested more time in understanding how it can be used in the right way.

With tools like Copilot being integrated into Microsoft 365, I've seen first-hand how AI can enhance our work rather than replace it. The capabilities it has - and the productivity and efficiency gains it unlocks when used responsibly - are honestly mind-blowing!

What excites me about the future

I'm passionate about seeing more women enter the field. Since I started my career, the number of female engineers has grown, but there's still a long way to go. The industry is still heavily male-dominated, and it would be amazing to see that move closer to a 50/50 split in the future.

My aspirations

Since moving into engineering process management, I've been developing new skills through hands-on learning and by working with a wide range of stakeholders across the business.

I thrive in the world of processes, and **I'm excited to see where it takes me.** One day, I'd love to become Director of Engineering Processes.

Ignore the stereotypes. Choose this path because you want to, not because someone tells you it's right or wrong. Embrace every challenge - they will push you, but you'll come out stronger and more capable.

It's an incredibly rewarding career, and I know I wouldn't be doing the job I love today without my electronics background.



Leesa Kingman

About me

I am a **Senior Principal FPGA Engineer and Team Lead** at MBDA. I have spent 25 years in industry after studying Computer Systems Engineering at the University of Sussex. I didn't know I was unusual until I got to university to discover I was 1 of 4 female engineers in a cohort of 200! I live in small town with my family.

My inspiration

Having taken Maths, Physics and Chemistry for A-level I was unsure what to do with them for university. But everything clicked when I had the chance to attend a Girls in Electronics course. The course gave me hands-on experience in coding, electronics, and engineering, and **I realised how much I enjoyed applying theoretical knowledge to real-world problems.**

That experience made everything I was learning feel relevant and exciting, and I instantly knew that it was the path for me. Since then, the field of electronics has continued to captivate me with its endless possibilities for innovation.



My strengths

My strengths are in problem-solving and supporting others. I love diagnosing issues and finding solutions, especially when it comes to design challenges. There's a real sense of satisfaction in making things work.

I also have a strong ability to treat people as individuals, which helps me effectively mentor and guide others. Helping people succeed and grow is something I'm passionate about, and I thrive in creating environments where people can reach their potential.

Fascinating tech

FPGAs (Field Programmable Gate Arrays) have become much more powerful, flexible, and accessible. The integration of processors, enhanced memory and I/O bandwidth, and the rise of cloud FPGA services have all contributed to expanding the potential use cases of FPGAs—from telecom and industrial applications to cutting-edge fields like AI/ML and cloud computing. At the same time, advances in software tools have made FPGA development more approachable and practical for a wide range of users. This has continued my interest in this area as the best to work in!

What excites me about the future

The **industry is evolving rapidly, and young engineers are at the forefront of that change.** New technologies are pushing the boundaries of what's possible, and it's exciting to think about the advancements just around the corner.

As someone who enjoys mentoring, I'm also passionate about helping the new generation discover what excites them in this dynamic field and guiding them toward their goals. Seeing young talent learn, grow, and bring fresh perspectives is one of the most rewarding parts of being part of this industry.

My aspirations

My aspiration for my future career is to continue learning and growing in an ever-evolving field. **The world of engineering is dynamic, and every day brings new challenges and opportunities.** I want to stay at the forefront of those changes, whether it's mastering new technologies or solving complex problems.

In addition, I am committed to contributing to the growth of female engineers, particularly through my work on the D&I taskforce in my current role. I hope to inspire and mentor more women to pursue engineering careers and help create a more inclusive, diverse workforce for the future.



Don't let stereotypes hold you back. Electronics is such an inclusive place to work. Believe in yourself, get as much information as you can via people in industry, work experience, research, open days etc.