



GA GENERAL ASSEMBLY

Break Into a Tech Role in Singapore:

**3 Steps to Take &
How to Finance It**

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Introduction

Singapore has long been a global tech and innovation hub. Now in 2025, the pace of digital transformation is unlike anything we've seen before. Fueled by **national investment in smart technologies**, AI adoption across industries, and a growing regional need for cybersecurity resilience, Singapore's tech sector is not only thriving, but evolving rapidly.

For job seekers, career changers, or tech professionals looking to level up, now is a powerful time to align your skills with the new digital economy.

If you're serious about breaking into tech or accelerating your career in 2025, it pays to know where the demand is strongest. According to **recent hiring data**, these are the fastest-growing roles in Singapore right now:

- **AI Researcher**
- **Quantitative Developer**
- **AI Engineer**
- **Platform Engineer**
- **Quantitative Researcher**
- **Technical Support Engineer**

These fast-growing roles reflect a deeper trend: companies are investing in talent that can build, secure, and scale intelligent systems.

The good news? With the right training, these jobs are within reach. Many tech roles in Singapore offer high salaries, flexible working options, and strong growth potential – but only if you can show up with job-ready skills.

Wondering how you can capitalise on this movement and build a sustainable future for yourself? The following guide offers a step-by-step journey to get you there in just 12 weeks.



The state of the tech job market in Singapore

Singapore is home to 80 of the world's top 100 tech companies. With giants like Google, Microsoft, and Accenture maintaining strong engineering teams here, there's no question that the country remains a magnet for global innovation.

But the opportunity extends beyond just "Big Tech." As Singapore doubles down on its Smart Nation ambitions and accelerates AI adoption across industries, there's a growing demand for tech professionals who can build, scale, and secure the digital foundations of the modern economy.

From backend infrastructure to AI-driven platforms and customer-centric digital products, tech is no longer a support function – it's a strategic differentiator. As businesses across every sector race to automate processes and deliver better digital experiences, the demand for future-ready tech talent is only growing.

Need proof? Just look at recent statistics to see how the labor market is trending:

- **83% of employers** in Singapore say they are **struggling to find skilled talent** – up from 79% in 2024, and nearly double the rate from 2019. To address the ongoing talent scarcity, employers are focusing on upskilling and reskilling current employees, increasing wages, and targeting new talent pools.
- **Nearly 1 in 4 employers** plan to prioritise hiring for **tech and digital roles in 2025**, with software engineering, cybersecurity, and AI among the top focus areas.
- AI is becoming a baseline expectation: **94% of Singapore-based business leaders** say they expect their companies to be **AI-driven by 2028**, and they're hiring accordingly.

The **2025 National Skills Report** by SkillsFuture Singapore highlights **skills in generative AI** – ranging from ethical governance to model development – as increasingly essential for professionals across industries, as organisations seek to ensure responsible, scalable AI adoption.

In this chapter, we'll explore the underlying trends driving the shift from manual to digital labour.



Singapore's tech labour market trends*

63%

YoY growth in tech roles on JobStreet, Singapore's leading job platform

9%

More tech role job ads than non-tech job ads

12%

The premium employers are willing to pay for workers with tech skills

Source: [Digital News Asia](#)

Tech trends driving Singapore's digital transformation

As Singapore's economy digitalises, tech talent will drive innovation and progress.

Here are the trends driving the need for new skills – and new ways of working.

Singapore's Rising Star: Tech Trends Driving Singapore's Digital Transformation

Innovation & creativity

As automation handles more routine tasks, tech skills are driving new levels of innovation. Professionals across industries are leveraging AI and automation not just to keep pace, but to innovate and grow within their roles.

Automation

In 2025, automation skills are essential across all fields. From business to finance, professionals are expected to understand automation fundamentals, contributing to a productivity boom and adapting to a rapidly changing workforce landscape.

Skills investment

Programmes like TeSA are developing 15,000 AI practitioners and reskilling 18,000 tech professionals in high-demand areas such as AI, cybersecurity, and 5G. These efforts are preparing Singapore's workforce for the digital economy, securing the country's competitive edge.

Soaring demand

Tech talent is in demand across sectors like education, healthcare, and services, as digital transformation accelerates across industries, fueling the country's growing economy.

Digital Enterprise Blueprint (DEB)

The DEB, launched in 2024, is accelerating digital adoption among SMEs, providing a roadmap for AI integration, cybersecurity, and workforce upskilling. It aims to support 50,000 SMEs over the next five years.

A future-ready workforce

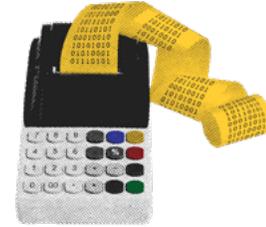
Singapore's emphasis on upskilling ensures a workforce equipped for the evolving digital economy, unlocking opportunities for growth and success in an increasingly tech-driven world.



Modern trends: Every industry's a tech industry in Singapore

The need for tech-savvy workers isn't limited to tech companies. In truth, tech is needed to support core business functions across all industries – and fuel the nation's roaring economy.

Consider this: **72% of graduates from General Assembly Singapore tech bootcamps** are working in traditionally “non-tech” sectors, such as:



Banking & Finance	Professional Services	Retail & E-commerce
<p>Singapore remains one of the leading financial centres globally – trailing only New York, London, and Hong Kong.</p>	<p>Singapore is a hub for aerospace, creative arts, energy, logistics, biotech, sustainability, electronics, medtech, and engineering.</p>	<p>Singapore's e-commerce market is projected to reach approximately S\$7.8 billion in 2025.</p>
<p>High quality of life and investments in education underlie Singapore's rise to fintech fame.</p>	<p>Singapore's professional services industry is projected to reach a total of S\$27 billion by 2025. Additionally, this growth is expected to create 3,800 new PMET (professionals, managers, executives, and technicians) jobs each year.</p>	<p>Mobile commerce is rapidly gaining traction, with 83% of online shoppers in Singapore using their mobile phones for purchases, making it the dominant choice for consumers.</p>
<p>In 2024, Singapore led Southeast Asia in fintech funding, raising \$995 million, with significant investments in blockchain, AI, and regtech sectors.</p>	<p>Companies in Singapore, including Accenture and Amazon Web Services (AWS), are actively seeking to fill thousands of tech-related positions, highlighting a continuing demand for tech talent.</p>	<p>To keep up with the sharp increase in digital consumers, more tech skills are needed to ensure optimal shopping experiences.</p>
<p>The Singapore government has injected an additional S\$2 billion into the Financial Sector Development Fund to accelerate digital adoption and talent development in the financial services sector.</p>	<p>Staying on top of innovation and acquiring the right tech skills will help professionals manage their time efficiently and remain attuned to client needs amid greater market shifts.</p>	<p>Roles in the broad retail sector range from web designers, app developers, and UX designers, to data analysts, product managers, and digital marketers.</p>

New hiring practices for a next-gen workforce

Skills over degrees

Employers are increasingly valuing practical experience and skills certifications over academic credentials. This shift is especially strong in fast-evolving fields like cybersecurity, data analytics, and machine learning.

- Example: More job postings now list “AWS certification” or “Python proficiency” as must-haves, without requiring a university degree.

Contract & project-based hiring

Companies are embracing flexible staffing models to access specialised talent quickly. Contract roles in AI, software engineering, and UX are becoming more common, offering professionals variety and autonomy.

- A Randstad report shows [rising demand for contract-based tech professionals](#) to meet evolving business needs.

Green and tech-integrated roles

New job categories are emerging at the [intersection of tech and sustainability](#). With a 27% YoY rise in green job postings, employers are hiring for hybrid roles that require both environmental and digital expertise.

- In-demand titles include: ESG Data Analysts, Sustainability Engineers, and Carbon Intelligence Specialists.

Expanding talent pools

To address skills shortages, companies are increasingly focusing on [skills-based hiring](#) and [targeted upskilling](#). Many employers are looking beyond traditional hiring routes and seeking to tap into diverse talent pools, including mid-career changers who are upskilling in high-demand areas such as tech and AI.

Hybrid work is the new normal

[Flexible work arrangements](#) are a major draw for talent. In 2025, 66% of Singapore professionals are working in hybrid environments – the highest rate in Asia.

As Singapore’s tech landscape evolves, opportunities for career shifts are expanding. With skills-based hiring and upskilling programmes on the rise, many professionals are looking to transition into tech roles. In the next chapter, we’ll explore what you need to know before making the leap into a tech career in Singapore.





What to know before switching to a tech role in Singapore

The evolving job market in Singapore presents a compelling opportunity for professionals considering a career shift into tech. LinkedIn's 2025 report indicates that 58% of professionals globally are [expected to look for new jobs](#), with Millennials (76%) and Gen Z (71%) leading the trend.

However, the job search has become more challenging, with 61% of respondents finding it harder to secure a job compared to the previous year. While the job market stays competitive, tech roles in areas like AI, data analytics, and cybersecurity are seeing strong and sustained demand. For those contemplating a transition into tech, understanding these market dynamics and aligning your skills accordingly can pave the way for a successful career shift.

Once you overcome common myths, understand you already possess many of the skills you need to be successful, and find a role that suits you, all that's left are three steps to kickstart your new career.

Career change lies we tell ourselves – and how to overcome

What stops many people from landing a dream tech job are mistaken assumptions, such as:

Myths and facts about breaking into tech

“I need a niche set of technical skills to succeed.”



A tech career in 2025 doesn't necessarily mean coding all day. Today's tech professionals draw on creativity, project management, and communication skills as they collaborate, problem-solve, and innovate across teams.

“I can only pursue a job that relates to my degree.”



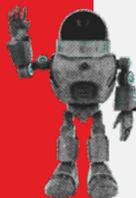
Employers are placing increasing value on transferable skills over traditional academic backgrounds. Thanks to industry-aligned bootcamps, you can gain job-ready tech skills in just a few months – much faster than pursuing a new degree.

“It's too late for me to pursue a new career in tech.”



Learning is lifelong. Programmes like Generation Singapore and TeSA Mid-Career Advance are designed specifically to help working adults – especially those in their 30s, 40s, and beyond – reskill and thrive in high-demand tech fields.

“AI will replace all the tech jobs soon anyway.”



While AI continues to evolve, it still lacks uniquely human capabilities like empathy, creativity, and ethical judgment. In 2025, AI handles repetitive tasks, enabling professionals to continue their focus on strategic problem-solving and innovation.

And if you're concerned about cost as a barrier to career change, Singapore offers many funding options to ease the financial burden. One example is the [IMDA Tech Immersion and Placement Programme \(TIPP\) subsidy](#), which covers **70 to 90% of the training costs** for Singaporeans and Permanent Residents.

Do you have these transferable skills for tech?

With common career changer myths out of the way, you can confidently move forward in pursuit of a brighter future. Virtually anyone with the right combination of hard and soft skills can transition to a tech role – and, chances are, you have many of these skills already:

- ✓ Communication
- ✓ Active listening
- ✓ Team player
- ✓ Project Organisation
- ✓ Management
- ✓ Time management
- ✓ Curiosity
- ✓ Resourcefulness
- ✓ Adaptability
- ✓ Analytical thinking
- ✓ Creative thinking
- ✓ Problem-solving
- ✓ Self-initiative
- ✓ Ability to multitask
- ✓ Perseverance

If you have these skills, then discovering the right tech role is the next step in your journey.

Top tech roles in Singapore

While there are dozens of tech-related roles and new job titles popping up all the time, some of the most common entry-level tech career paths include:



	Back-End Developer	Data Analyst	UX/UI Web & App Developer	Data Scientist	Cloud Architect
Job Duties	Create the technical architecture of websites and mobile apps.	Clean and prepare data for visualisation, reporting, and analysis.	Develop wireframes, user flows, and digital products that are intuitive, enjoyable, and accessible.	Glean valuable insights from huge datasets to guide product development and decision making.	Strategise, create, and manage cloud environments to help the business stay organised and scale.
Technical Skills	Languages like Python, .NET, Java, PHP, and Ruby	SQL, Python, Tableau, Microsoft Power BI	Sketch, Figma	Python, R, SQL	Azure Cloud, Google Cloud, Python, .NET, JavaScript

How to get started on a career pivot into tech

Ready to make your move? This section will help you move from ambition to action.

Step 1:

Pick a lane – and pursue a role

Research opportunities

Consider the future career prospects of the role and industry you intend to pursue.

Start your shortlist

Have a list of dream companies or organisations you'd love to work for and find out more about them through LinkedIn or the company's website.

Assess your skills

List your personal strengths and consider what you might apply to your desired role. Google what skills are needed and sign up for courses in topics like communication or project management to fill in the gaps.

Network with industry pros

Join events, webinars, or meetups organised by people in your field of interest. Ask questions in industry forums and reach out to notable speakers to build your network.

Flex your skills

Build your portfolio with mini projects designed to develop fundamental technical skills. Watch online tutorials or attend short workshops which let you apply what you've learned.

Test-drive your role

Apply for internships, apprenticeships, or short-term contract roles for a more holistic experience of what your future career might be like.

Step 2:

Choose your bootcamp provider

When changing careers, the right bootcamp ensures you gain the right skill set and support for a meaningful and sustainable career. Here are some benefits of selecting a General Assembly tech bootcamp.

Access award-winning curriculum

Courses are designed with employer partners to feature the most in-demand tech skills. We're constantly updating our curriculum to provide a strong technical foundation in keeping with current trends.

Engage in hands-on projects

Hands-on projects allow students to apply acquired technical skills and knowledge, tackling real-world challenges, while developing communication and project management skills through collaboration with classmates and instructors.

Take inspiration from instructors

Passionate, experienced instructors bring a wealth of insights gleaned from serving in successful tech roles. They're committed to providing key concepts, tools, and personalised feedback, and support student confidence every step of the way.

Find your way with personalised career coaching

Work one-on-one with a dedicated career coach on how to build your resume, tell your story, craft an attractive portfolio, meet professionals from your desired industry, and discover career opportunities.





Step 3: Find your financing

In 2025, **the government continues to invest** in various reskilling labour initiatives to provide wage growth and job opportunities for local residents. As a result, Singaporeans have abundant funding options that make a career change surprisingly affordable. Here's what you need to know:

Start with the IMDA (Infocomm Media Development Authority)

As “architects of Singapore’s digital future,” the [IMDA](#) plays a vital role in equipping the Singaporean workforce with the most relevant and up-to-date digital skills. If you’re a citizen or Permanent Resident, this is a great place to start.

Tech Immersion and Placement Programme (TIPP)

The IMDA’s TIPP subsidy has helped many Singaporeans pay for their General Assembly bootcamp training and move onto fulfilling tech careers. TIPP helps non-IT professionals ramp up their skills and portfolios, while providing networking opportunities to fast-track employment.

Who qualifies for TIPP?

To qualify, you must:

- Be a Singaporean citizen or Permanent Resident
- Undergo a pre-admission screening and interview
- Seek employment in a tech role after course completion

How much of the subsidy am I eligible for?

Singaporeans are eligible for 70 to 90% of the subsidy, depending on age.

Don't meet the TIPP requirements?

No worries. Other options include:

- **Technology in Finance Immersion Programme (TFIP)**
Sponsored by the Institute of Banking & Finance, TFIP is open to citizens or permanent residents (21+) who have no prior tech experience, but are willing to commit to full-time training and employment with one of their financial service partners. [Learn more.](#)
- **Union Training Assistance Programme (UTAP)**
The National Trade Unions Congress defrays the cost of skills upgrade training for members by up to \$500 per year. Assistance is available for a variety of industries, including IT. [Learn more.](#)
- **Temasek Polytechnic (in Partnership with General Assembly)**
Temasek Polytechnic has partnered with GA to offer tech courses in topics like UX design at a greatly reduced price for local Singaporeans, especially for those over age 40. [Learn more.](#)
- **SkillsFuture Credits**
Eligible Singaporeans aged 25+ can use up to S\$1,000 in SkillsFuture Credits to offset the cost of approved training courses. [Learn more.](#)
- **Post-Secondary Education Account (PSEA)**
If you're under 30 and have leftover funds in your Post-Secondary Education Account, you may be able to use them for eligible tech training. [Learn more.](#)



At General Assembly, our goal is to make tech education affordable and accessible for everyone. Our partnership with other organisations allows us to provide a range of subsidies, [including IMDA's TIPP subsidy](#), to those interested in taking a GA tech bootcamp in Singapore.

Resource Links:

- [IMDA](#)
- [TFIP](#)
- [UTAP](#)
- [Temasek Polytechnic](#)
- [SkillsFuture](#)
- [PSEA](#)

Note: Terms and conditions apply for each of these subsidies. Please visit the official websites above for more specific information.





Real stories from real career changers

As you prepare to make your move, know that many others have been in your shoes before. In this chapter, we'll share a few inspiring stories of Singaporeans who chose General Assembly as the catalyst for their career changes.



Lim Lian Xin

From Business Operations Manager to UX Designer

Lim Lian Xin always wanted to do something impactful in the digital space.

In her previous Business Operations role, she wanted to find a way to better cater to consumer needs and wants. As a UX Designer, she now does that – on a grand scale.

Through a General Assembly bootcamp, Lian Xin engaged in projects that cultivated the technical skills and personal qualities to succeed as a UX Designer. She attributes a large part of her growth to the professionalism and dedication of GA instructors who helped her above and beyond the classroom.

Currently, Lian Xin works at a large pharmaceutical company on projects that improve the lives of others – just what she set out to do.

From Teacher To Data Analyst

While working as a teacher full-time, Ahmad enrolled in General Assembly's part-time Data Science bootcamp to learn how to utilise data to drive insights.

His classmates and instructors kept him motivated, while career coaching and networking events helped Ahmad learn more about the tech industry.

Currently, Ahmad is putting the data skills he acquired to work as a Regional Pricing Analyst at a global energy company.

Previously, he also worked at Apple as a Market Insights Analyst, proving that the sky's the limit when it comes to career change.



Ahmad Khalil



Jane Tan

From Flight Attendant to Software Engineer

After five years in the skies with Singapore Airlines, Jane was ready for a grounded challenge – one that would push her intellectually and open up new career possibilities. With no prior coding background, she took the leap into General Assembly's Software Engineering Bootcamp.

Though the learning curve was steep, Jane leaned on her transferable skills – adaptability, communication, and attention to detail – to stay the course. She also found that asking direct questions and being honest about her goals helped her navigate the transition with clarity and purpose.

Today, Jane is a Software Engineer at Tomie Technologies, where she helps build backend systems that power sustainable maritime solutions. She's thriving in the fast-paced tech world and proving that with the right mindset, it's never too late to chart a new course.

Tech talent is the future of Singapore – and so are you

With an excellent quality of life, attractive business climate, and deep investments in education, Singapore is an ascending star. As technological innovation continues to define the 21st century and reshape the nature of work as we know it, the opportunities for advancement and compensation within the labour market will make Singapore an even better place to live. But workers young and old must embrace the digital future and pursue skills training in order to secure prosperity – for their families and for their country.

Anyone can make this jump once the right foundation is in place. Three easy steps will set you on a life-changing course for the better:

- Take a moment today to consider which role you may be interested in.
- Sign up for a bootcamp that can give you the skills you need in just three months.
- Explore resources to minimise your out-of-pocket costs.

General Assembly's vast network of employer partners gives us a unique insight into the current business climate that we share with every learner in our programmes. Join a bootcamp to start working on practical, real-world problems and resume-building projects that prepare you to contribute to your new employer on day one. With our career counselling programme, career fair events, and alumni network, you'll have all the support you need to make the leap into a brand new tech role.



[Get Started Now](#)

About GA:

General Assembly (GA) is the leading talent and upskilling community that helps individuals and businesses acquire the real skills required to succeed in an increasingly complex technological era. Founded in 2011 to make tech-centric jobs accessible to anyone and meet the demand of fast-growing tech companies, GA evolved into a center of excellence in training people from all backgrounds to upgrade their practical knowledge of tech skills now required in every company and in any role. With a global presence, hands-on instruction, and a passionate alumni community, GA gives learners 360-degree support as they take the next step in their career journey. As part of the Adecco Group and partner of premier talent solutions provider LHH, GA matches the right talent to business needs. All day, every day: GA puts real skills to work.