

Queensland Tech Jobs Opportunity

July 2023



About the Tech Council of Australia

The Tech Council of Australia is the peak industry body for Australia's tech sector. Providing a trusted voice for Australia's technology industry the Tech Council comprises the full spectrum of tech companies.

We aim to advise and engage with Australian governments, businesses, and the wider community to help support the ongoing creation, development, and adoption of technology across industries. Our vision is for a prosperous Australia that thrives by harnessing the power of technology.

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Executive Summary

Queensland's technology sector is a crucial driver of the state's economy, employing over 140,000 tech workers. This figure is expected to grow to 185,000 by 2030, making it three times larger than Queensland's agricultural industry today.

Tech jobs, characterised by high labour productivity, are enhancing economic growth and fostering strategic industries such as Advanced Manufacturing, Biomedical Technologies, and Space.

Queensland's tech workers represent 15% of the national tech workforce. Within Queensland, tech jobs are predominantly in tech-related companies, professional services, and public administration, representing 4% of all jobs. The greatest number of tech workers are in South East Queensland, particularly around Brisbane and the Gold Coast. The fastest growing tech employment hotspots include North Lakes, Jimboomba, and Southport, which has seen high growth rates in tech workers off very low bases ten years ago. Inner Brisbane, although seeing lower growth than emerging tech employment hotspots, still added a substantial 10,000 tech jobs in the last ten years.

From early 2020 until now, tech jobs have grown at five times the rate of all other occupations in Queensland. In Queensland, the growth in tech jobs diverged from the growth rate of all other occupations in 1995. Since then, the growth in tech jobs has steadily picked up speed. This growth is the product of a multi-decade trend reflecting the greater digitisation of the economy.

The rise of remote work is opening up significant opportunities for tech employment in regional and remote areas of Queensland. The flexibility, security, and high-pay of tech jobs are expanding possibilities beyond urban areas, augmenting the sector's reach and impact.

1. The tech sector is a critical pillar of the Queensland economy

Tech is a significant employer of Queenslanders. There are now over 140,000 tech workers in Queensland, with more Software Engineers than Dentists or Bricklayers. By 2030, we forecast there will be 185,000 people employed in tech making it three times larger than the Agricultural industry in Queensland today, as shown in Figure 1.

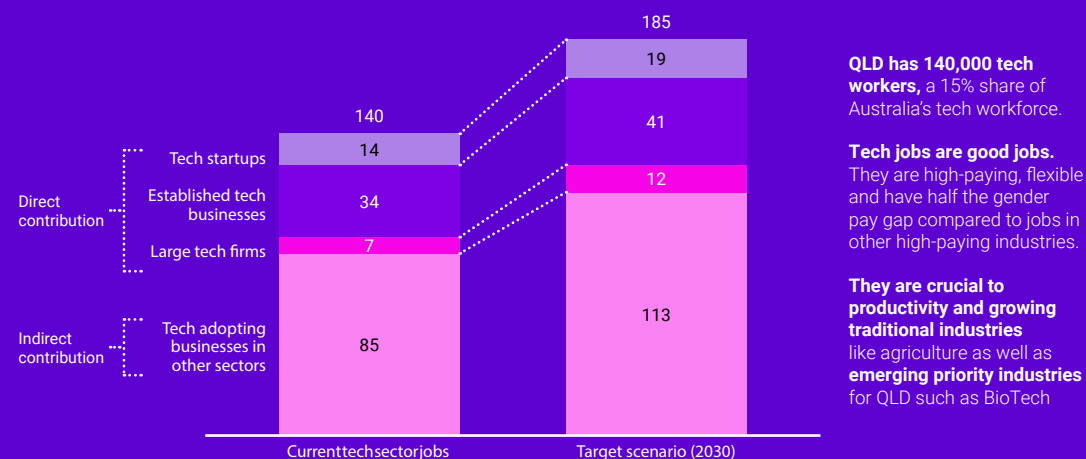
Jobs in tech are highly-paid, secure and fast-growing. Recent data from SEEK shows that the average tech salary has now surpassed mining. This makes the average tech salary second only to advertised salaries for CEOs¹. The fast growth in tech jobs is good for the Australian economy because these jobs have high labour productivity, support greater technology adoption and competitiveness in a range of industries². Tech jobs also support the emergence of new and strategic industries such as Advanced manufacturing, Biomedical technologies and Space.

1. Tech Council of Australia, Tech Jobs Update 2023
2. Tech Council of Australia, Australia's Tech Jobs Opportunity

Tech is an important source of good new jobs in the QLD economy

Figure 1: Tech sector employment by 2030

Tech sector employment by 2030
'000, employed persons in the tech sector



Source: TCA, Tech Jobs Update 2023



Photo credit: Gilmour Space

Case Study: Gilmour Space

Retraining racecar drivers to build rockets

Gilmour Space is a scaleup on the Gold Coast making space more accessible to the global market with their Australian-made Eris orbital launch vehicles, rocket launch site, and G-Sat satellites.

In the last five years they've grown from employing 20+ people to over 200, making them the largest space technology employer in Australia. As a pioneer in a new industry within Australia, there isn't a large existing pool of talent with experience in similar companies. This means Gilmour hires people from adjacent industries with transferable skills and trains them in-house.

By making space more accessible to the global market, Gilmour is helping to accelerate the adoption of critical space technologies on Earth – such as faster detection and tracking of fires, floods and other natural disasters, space-based solar power and the Internet of Things, less intrusive mining exploration methods, and precision agriculture.

Gilmour Space has retrained Australians from a wide variety of occupations

Film and Stage
ProductionCrew



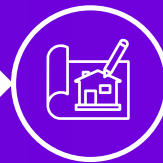
Composites
Manufacturing
Technician



Marine
Scientist



Structures
Technician



Supercars
Race Driver



Machinist
Apprentice



2. Tech is an important source of good, new jobs in the Queensland economy

Tech jobs in Queensland account for approximately 4% of all jobs, which is half the size of the Construction industry.

Tech workers are primarily employed in tech-related companies or professional services, followed by Public Administration. This distribution of tech workers across the economy is similar to most other large states, like New South Wales and Victoria. However, in Queensland the Tertiary Education sector is a larger employer of tech workers than in other large states, as shown in Table 1.

Table 1: Top 5 industries by employment of tech workers

| | QLD | NSW | VIC | WA |
|---|---|---|---|---|
| 1 | Technology Design and services ³ | Technology Design and services | Technology Design and services | Technology Design and services |
| 2 | Professional, Scientific and Technical Services | Professional, Scientific and Technical Services | Professional, Scientific and Technical Services | Professional, Scientific and Technical Services |
| 3 | Public Administration | Finance | Finance | Public Administration |
| 4 | Telecommunications | Public Administration | Telecommunications | Metal Ore Mining |
| 5 | Tertiary Education | Telecommunications | Public Administration | Telecommunications |

3. This is an abbreviation of the ANZSIC sub-industry 'Computer System Design and Related Services'.



Tim Moylan

Sales & Marketing Executive VP,
TechnologyOne



Tim's career in tech has enabled him to live and work in every part of the world. He has led software businesses in Asia Pacific, Japan, Europe and most recently the United States. His role as Sales & Marketing Executive Vice President at TechnologyOne was an opportunity to join a growth business and come home to Australia.

Tim began his career in Australia as an army officer. While he learned a lot, he knew that wasn't a long term career path for him. But he saw his skills as an army officer were transferable to tech so it felt like a natural transition.

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“There are a lot of commonalities between the military and tech. Both are very tactical, you need to understand the environment, the capabilities, plan thoroughly and empower teams to deliver.”

Working sales and marketing at a tech company, Tim's days are “a mix of tactical, operational and strategic thinking”. His work ranges from exploring option for PR campaigns to raise brand awareness in a particular region, through to building meaningful relationships with customers. He also stresses the importance of regularly updating the company's strategy which enables their team to work towards shared goals.

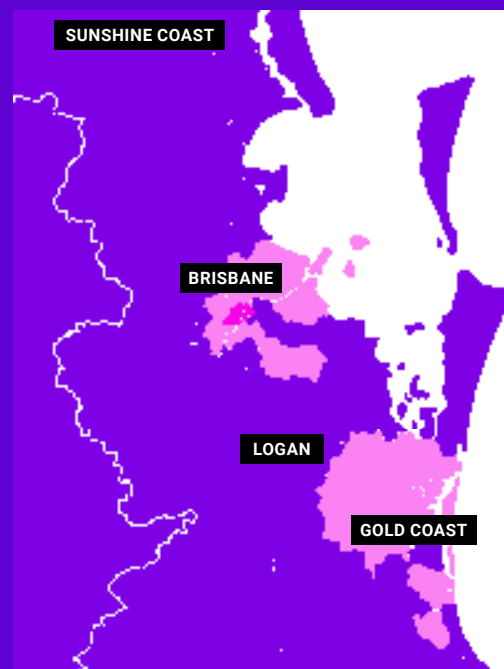
To people interested in moving into tech but unsure whether they're the right fit, Tim suggests thinking about the fundamental nature of tech jobs and the industry. “Change is the only constant in this world, and the pace of change in technology is intense. If you thrive on ambiguity, you will absolutely thrive in this industry.”

3. Tech jobs span the state, from SafetyCulture in Townsville to Go1 in Logan

Tech jobs are mostly concentrated in South East Queensland around Brisbane and the Gold Coast, as illustrated in Figure 2. Tech workers also live closer to where they work, with many living in and around the Brisbane CBD and the Gold Coast.

Figure 2: Distribution of tech workers across Queensland, by place of work and residence

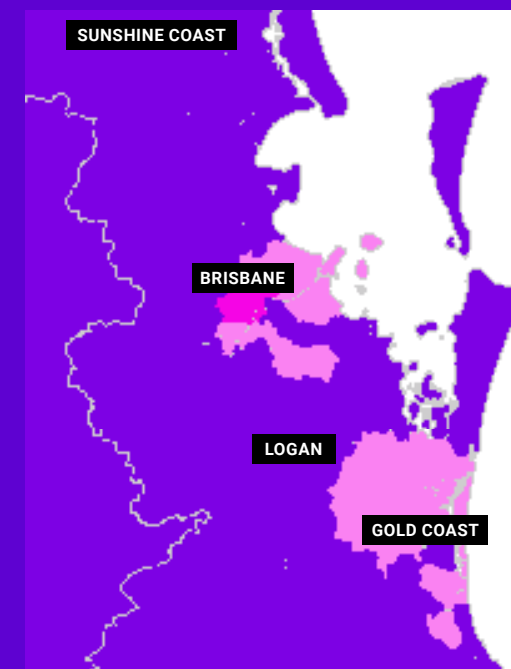
Top regions in SE QLD for tech jobs



The top regions in SE QLD for tech jobs are in **Inner City Brisbane** and parts of the **Gold Coast**.

Collectively, these regions account for **more than half** of QLD's tech jobs.

Top places of residence for QLD tech workers



QLD tech workers live close to where the jobs are, with many living in and around the Brisbane CBD and parts of the Gold Coast.

Source: 2021 Census
Shares are labelled High, Medium, Low with respect to the average across SA3 regions
Shares < 50% (average) are Low, 50% - 74% are Medium and 75% - 100% (Max) are High

Melcar McCaig

Director of Engineering, SafetyCulture



Melcar found the tech sector by accident. Having studied accounting at university, Melcar was looking for her first job in Manila's Business District when she found Accenture which had just opened their office in the Philippines. Accenture was open to training anyone because there were so few tech graduates at the time, and Melcar joined the company as a Junior Software Engineer.

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"I recognized that my skills and knowledge from my finance background could be applied in a tech-oriented context. Through self-study, professional development programs, and on-the-job experience, I acquired the technical skills necessary to thrive in this incredible industry."

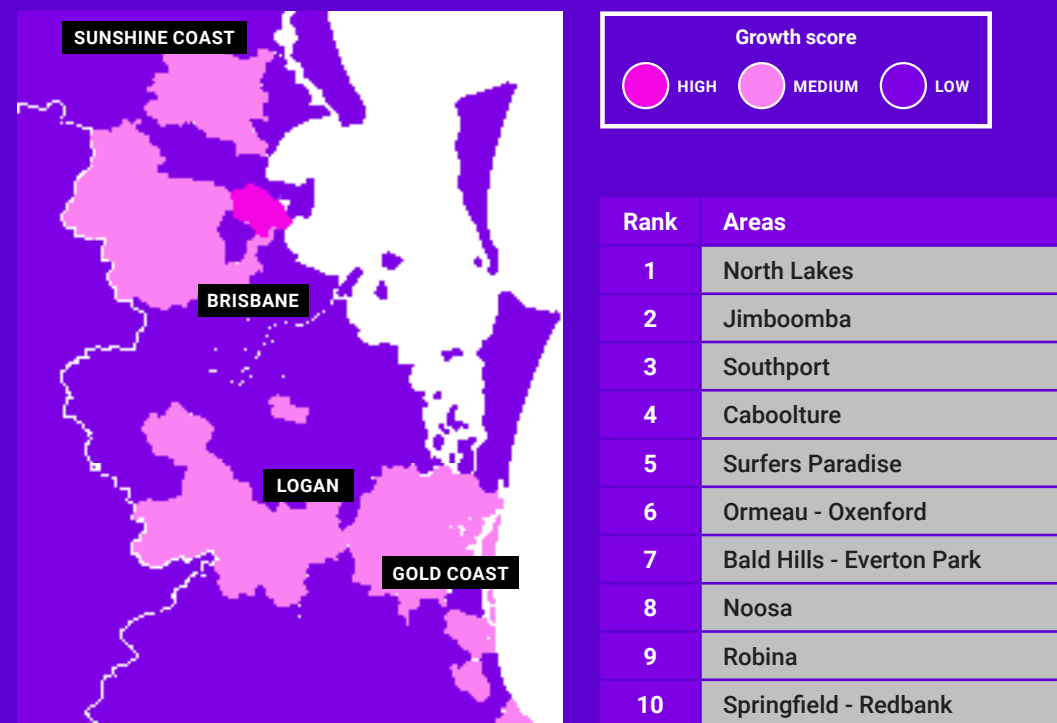
Since her first job as a Software Engineer, Melcar has worked across different domains ranging from fintech, telecommunications, CRM, SaaS, and workplace safety where she has held positions in quality engineering, deployment and infrastructure, team leadership, and program management.

When Melcar began her role as Director of Engineering at SafetyCulture she was surprised by the extent of her impact across the company. "I quickly realised that my decisions, strategies, and actions have implications that ripple across the entire organisation. Engineering decisions can influence product development, customer experience, cross-functional collaboration, and even company culture. Understanding the interconnectedness of various departments and recognizing the broader organisational impact has been both surprising and enlightening."

4. Tech jobs are amongst the fastest growing in Queensland

The fastest growing areas for tech jobs in Queensland form an arc around the existing hotspots for tech workers. The fastest growing SA2 in Queensland for tech jobs is North Lakes, a suburb in the Moreton Bay Region shown in Figure 3. In the last 10 years, the number of tech workers in North Lakes has grown from just over 20 to 600, representing a 270% increase. This is followed by Jimboomba in the City of Logan and Southport in the Gold Coast which have both also seen very high growth rates off a low base. While areas with more tech workers like Inner Brisbane have seen relatively lower growth rates, they have still added a large number of new tech jobs. In the last ten years, there have been 10,000 new tech jobs created in the Inner Brisbane area.

Figure 3: Fastest growing regions in Queensland for tech jobs



SEQ is home to the fastest growing regions for tech jobs in QLD.

Most of the fastest growing regions are outside of Inner City Brisbane in areas like Logan, the Gold Coast and Sunshine Coast.

Source: 2021 and 2011 Census, Labour Force Survey (May 2023)
The COVID period is defined as being Feb 2020 to Feb 2021
Post-COVID growth rates are calculated for the period Feb 2021 to May 2023. Pre-COVID annual growth rates are calculated for the period Aug 2017 to Nov 2019
Growth scores are labelled High, Medium, Low with respect to the average growth rate across SA3 regions
Growth rates < 50% (average) are Low, 50% - 74% are Medium and 75% - 100% (Max) are High

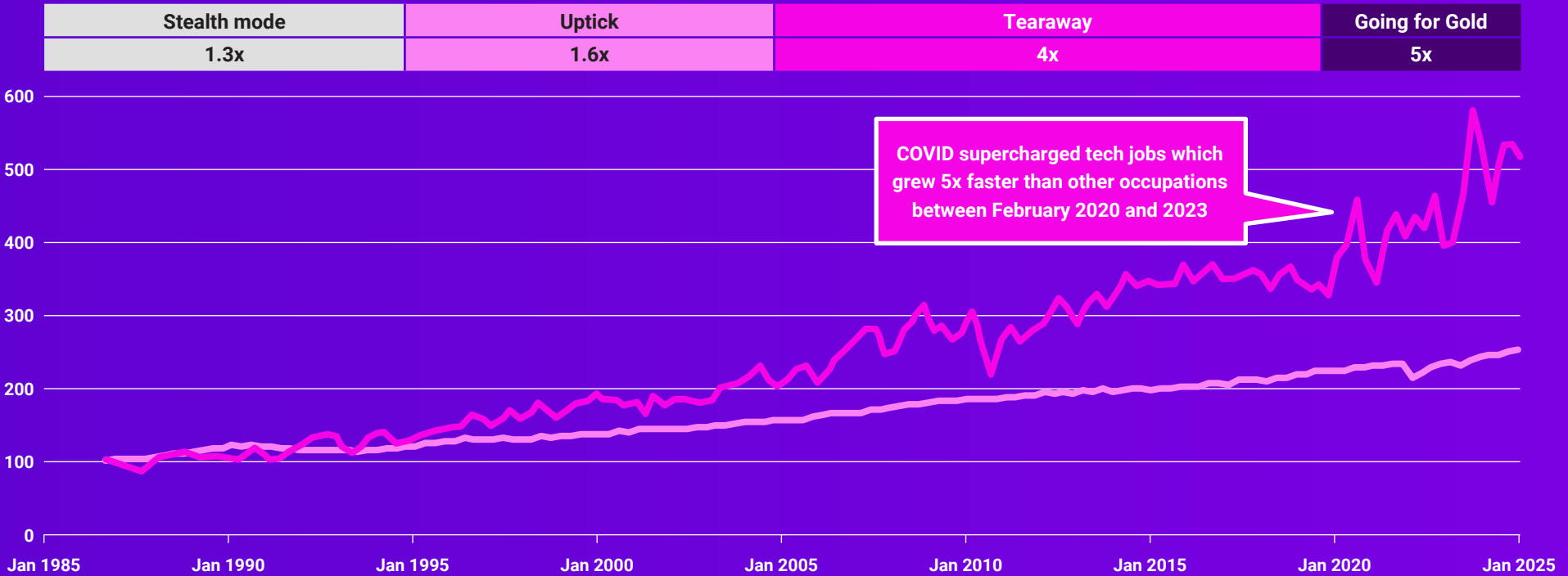
The rapid growth in tech jobs across Queensland has been the product of a multi-decade trend characterised by four phases, as shown in Figure 4. The first phase ‘Stealth mode’ between the mid-1980s and mid-1990s saw tech jobs hug the growth trend of all other occupations and only grow at 1.3 times the rate of all

other occupations. By 1995, the growth rate of tech jobs diverged from all other occupations. Between 1995 and 2005, we saw a second ‘Uptick’ phase of growth for tech jobs in Queensland. In this phase, tech jobs grew slightly faster at 1.6 times the rate of all other occupations. Between 2005 and 2020, tech jobs entered a third

‘Tearaway’ growth phase growing four times faster than all other occupations. From the onset of COVID, tech jobs entered a ‘Going for Gold’ phase growing at five times the rate of all other occupations.

Figure 4: Growth in tech occupations vs. all other occupations in Queensland

Growth in tech occupations vs. all other occupations in Queensland
Index, 100 from August 1986, tech occupations



Bevan Slattery

Founder and CEO, SODA



SODA is a business incubator that serves as a launchpad for innovative Australian-based projects and businesses in the realms of digital infrastructure, sustainability and ventures.

As CEO of a busy incubator, there's no typical day in the life of Bevan. "Every day is incredibly different but it's important that everything you do day-to-day is underpinned by your vision for the business". SODA has been built out of his experience founding and growing successful tech companies, including Megaport and NextDC.

Bevan began his career in administration within local government. Then when the Internet came along in the mid-nineties, he decided to do a Novell training course that enabled him to move into a tech role within the Queensland Government and later an internet service provider before starting his own businesses. "Moving into tech was exciting and I was curious so everything seemed like an opportunity".

For people interested in moving into tech, Bevan's advice is "just do it". He emphasises that there are multiple ways to get into tech. If you're interested in a specific area, he suggests finding relevant training then applying to everything you're interested in. If you are wanting to start your own tech company, he encourages aspiring founders to find someone likeminded, who you can trust and wants to build something from the ground up.

If you're currently in finance, HR or other business roles, he suggests finding a similar role within a tech company and working sideways into a technical role if that's the direction you want to take.

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"When you immerse yourself into a tech business - in any role - you are surrounded by the technology and the people in tech, and doors will open up for you."

5. Tech jobs represent a significant new opportunity for Queenslanders living in regional and remote areas

With the rise of remote working, there's now more opportunity than ever before for Queenslanders living in regional and remote areas to join the tech workforce. Tech jobs are some of the most flexible jobs⁴, enabling more workers to work remotely in high-paying and secure jobs.

4. Source: Tech Council of Australia, Australia's Tech Jobs Opportunity

Pier Two

Jack Deeb, Co-Founder & COO, Patrick McNab, Co-Founder & CEO, and Seamus McNab, CTO

The Pier Two team was originally focused on using blockchain technologies to make agricultural supply chains more efficient. While this application proved to be a dead-end for the company, they realised there was a gap in the market and took a step 'upstream' in the supply chain to become an infrastructure service provider to companies using blockchain.

The company was founded at the University of Queensland in 2018 then moved to a home office nearby in St Lucia where the team lived and worked. This became a particularly fortuitous decision when the COVID-19 pandemic began soon after. Despite lockdowns, they were able to continue working together in their shared home.

Reflecting on the time the founding team spent living and working together in the early stages of

the company's growth they feel "the camaraderie of being proximate was a true luxury but doesn't scale. The bonds being formed during that time were very important to growing the business over the next few years."

The core team is still based in Brisbane, and as the company has grown they have opened offices across Australia as well as overseas with most people working virtually. The team is now almost evenly split between software engineers and non-technical people, with backgrounds ranging from economics to business and law.

Pier Two's founding team see Brisbane becoming a force in the tech sector citing the strength of local universities with reputable computer science and engineering faculties and central hubs for tech communities and major events.



Left to right: Jack Deeb, Co-Founder & COO, Patrick McNab, Co-Founder & CEO, and Seamus McNab, CTO



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