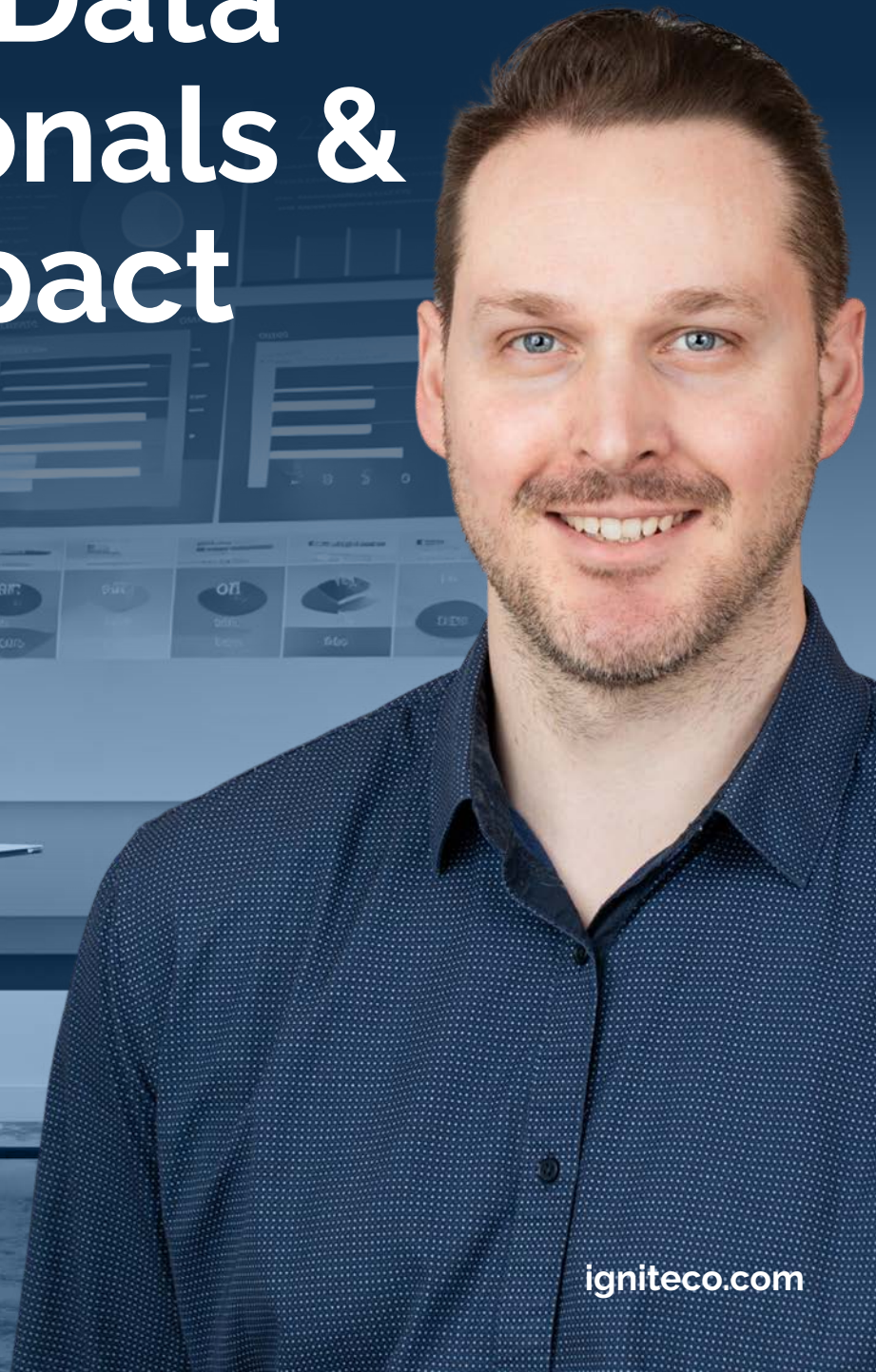




RECRUITMENT & TECHNOLOGY SOLUTIONS

Discover Australia's Data Landscape: Surge in Data Professionals & Their Impact



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Executive Summary: Data Professionals in Australia

Overview: Australia houses diverse data professionals including Data Analysts (11,516), Architects (590), Engineers (4,531), and Scientists (3,606) with varying gender ratios and tenures.

Key Locations: Sydney, Melbourne, and Brisbane emerge as hotspots, all with high demand for data expertise.

Industry Trends: IT & Services consistently lead in employment. Banking, Retail, and Computer Software sectors show notable hiring demands.

Skillset: Core skills across roles include SQL, Python, and data analysis, with emerging proficiencies in areas like data pipelines and statistical analysis.

Education: Major contributors to the data talent pool are UNSW, University of Melbourne, and Monash University. A significant portion holds advanced degrees, with recent graduates tilting towards Master's and PhD credentials.

In essence, Australia's data landscape is characterized by growth, shaped by top educational institutions, evolving skills, and clear industry demands.

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Data Analyst

- Australia is home to 11,516 data analysts, showing a gender divide wherein 39% are female, representing a minority compared to the 61% male analysts.
- On average, these data analysts have a short tenure, staying in their roles for just 1.1 years, suggesting either rapid career progression or frequent role changes.
- The market demonstrates a significantly high demand for hiring data analysts, indicating a burgeoning need for data expertise in the country



39%
FEMALE



61%
MALE

2,894
CHANGED JOBS

1.1 YEARS
MEDIAN TENURE
Professional are most likely to switch jobs



VERY LOW

LOW

MEDIUM

HIGH

VERY HIGH

HIRING DEMAND

This talent is **very hard to hire**

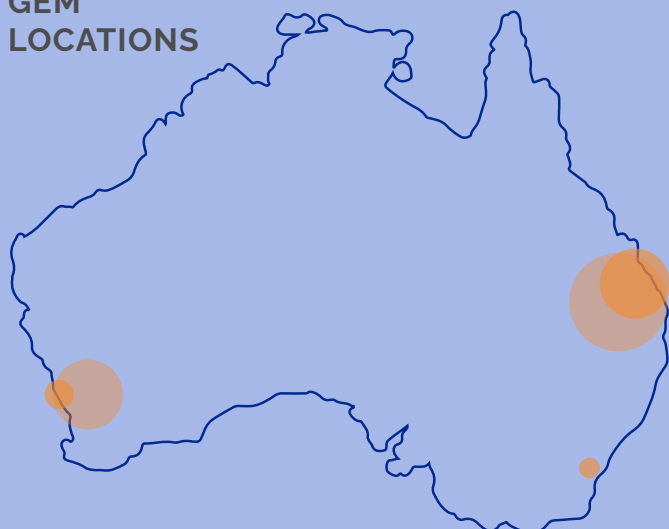
DATA ANALYST

Top Locations in Australia

WHAT ARE THE TOP LOCATIONS FOR THIS TALENT?

- The leading regions in Australia for data analysts are primarily centered in major urban areas: the Greater Sydney area tops the list with 3,668 data analysts, closely followed by the Greater Melbourne area with 3,554, and then the Greater Brisbane area with 1,056.
- These concentrations suggest these cities as pivotal hubs for data analytics in the nation.
- Notably, there is a pronounced and very high demand for data analysts in all three of these major locations, underscoring the significant role data-driven decision-making is playing in Australian businesses.

HIDDEN GEM LOCATIONS



- 1,056** Greater Brisbane Area
- 749** Greater Perth Area
- 642** Canberra, Australian Capital Territory



Market Area	Professionals	Hiring Demand
Greater Sydney Area	3,668	Very High
Greater Melbourne Area	3,554	Very High
Greater Brisbane Area	1,056	Very High
Greater Perth Area	749	Very High
Canberra, ACT	642	Very High
Greater Adelaide Area	535	High
Gold Coast	109	High
Greater Newcastle Area	92	High
Greater Hobart Area	91	Moderate
Werribee South, Victoria, Australia	69	Very High

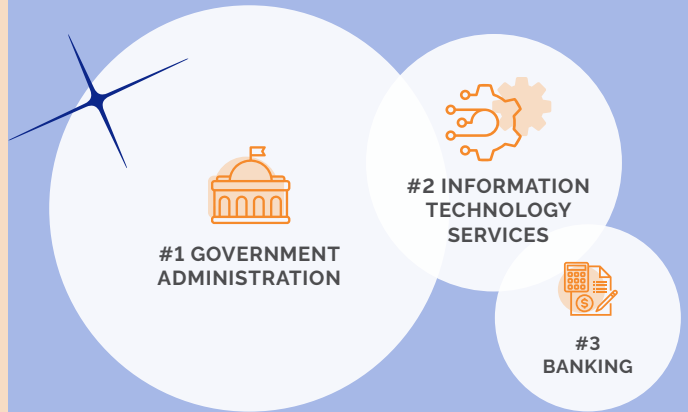
DATA ANALYST

Industry Sectors

WHAT INDUSTRIES ARE EMPLOYING THIS TALENT?

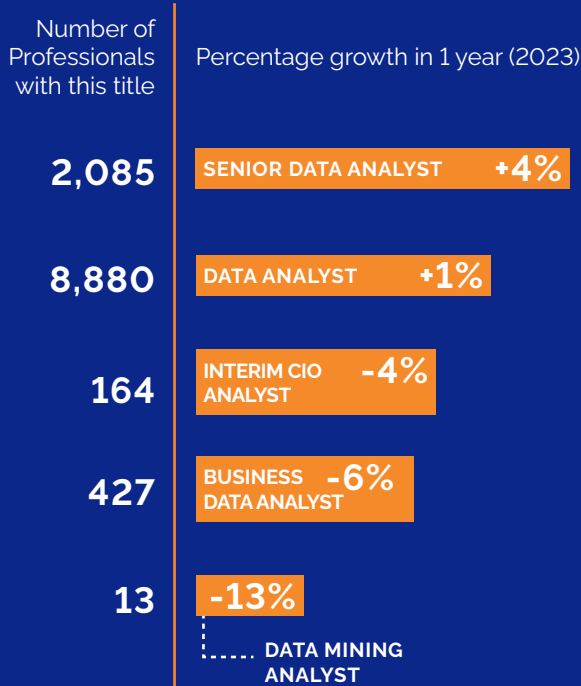
- Among the industries in Australia employing data analysts, Information Technology & Services stands out with 1,356 professionals and a high hiring demand. In contrast, Government Administration employs slightly more analysts at 1,596 but experiences a low demand for new hires. The Banking sector has 967 data analysts and an even more pressing, very high demand for talent.
- Additionally, other sectors such as Capital Markets, Retail, and Financial Services are also witnessing a surge in hiring demand, indicating a broad-based need for data analytics expertise across diverse industry verticals.

INDUSTRIES WITH TOP NUMBER OF PROFESSIONALS



Industry	Professionals	Hiring Demand
Government Administration	1,596	Low
Information Technology & Services	1,365	High
Banking	967	Very High
Higher Education	654	Low
Computer Software	586	High
Hospital & Health Care	496	Moderate
Utilities	377	Moderate
Capital Markets	353	Very High
Retail	348	Very High
Financial Services	328	Very High

FASTEST GROWING TITLES AMONG THIS TALENT



DATA ANALYST

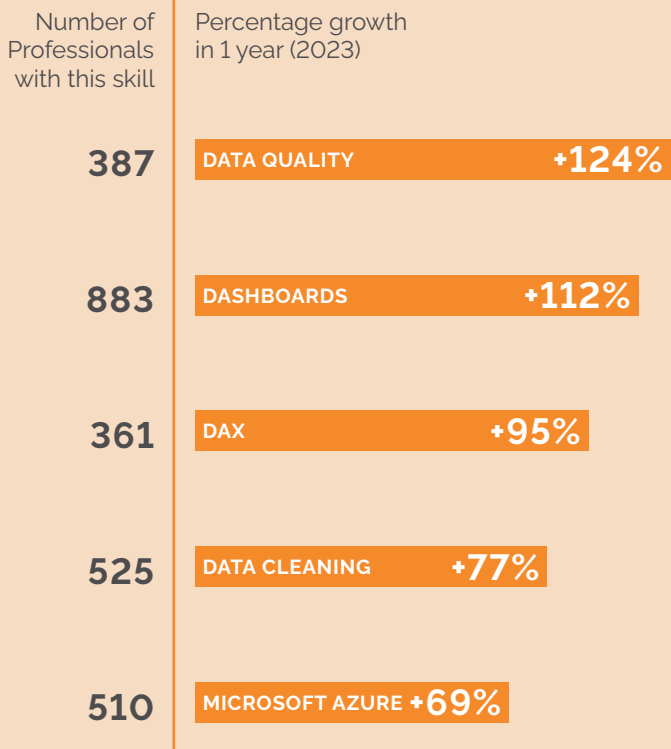
Industry Skills

WHAT ARE MOST COMMON SKILLS AMONG THIS TALENT?

- Core competencies defining data analysts predominantly include their proficiency in data analysis, analytics, and SQL, cementing these as foundational skills in the profession.
- However, in the ever-evolving analytics landscape, skills such as data quality, dashboard creation, and DAX (Data Analysis Expressions) are emerging at a rapid pace, signaling the direction in which the field is advancing and the adaptability required of its practitioners.



FASTEST GROWING SKILLS AMONG THIS TALENT



TOP SKILLS OF THIS TALENT

Skills	Professionals	% of Total
Data Analysis	10,903	95%
Analytics	5,631	49%
SQL	5,267	46%
Python (Programming Language)	3,764	33%
Microsoft Power BI	3,040	26%
Analytical Skills	2,900	25%
Tableau	2,871	25%
Business Analysis	2,852	25%
Data Visualisation	2,513	22%
Data Analytics	2,513	22%

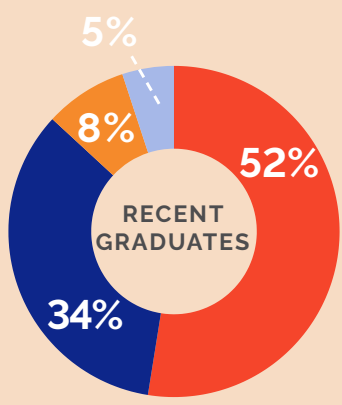
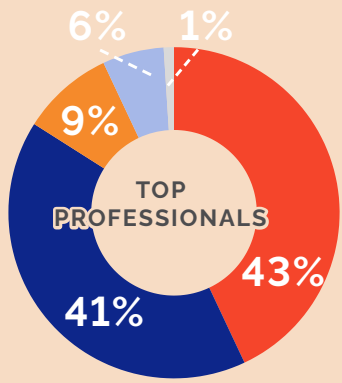
DATA ANALYST

Education of Data Analyst

WHAT SCHOOLS ARE PRODUCING THIS TALENT?

- Data analysts in Australia are predominantly alumni of renowned institutions: Monash University, UNSW, and the University of Melbourne lead as the top educational hubs for these professionals.
- Diving deeper into their educational credentials, 43% of all data analysts boast a Master's degree, while 41% have secured a Bachelor's degree, and a notable 9% hold an MBA.
- Interestingly, among the newer generation of graduates entering the field, there's a distinct tilt towards postgraduate studies. A striking 52% of recent graduates possess a Master's degree, 34% are armed with a Bachelor's degree, and 8% have an MBA, suggesting a potential trend towards higher academic qualifications in the domain.

% OF THE HIGHEST DEGREE THIS TALENT HAS ATTAINED



- MASTERS DEGREE
- BACHELORS DEGREE
- MASTERS OF BUSINESS ADMINISTRATION
- DOCTOR OF PHILOSOPHY
- ASSOCIATE'S DEGREE

SCHOOLS WHERE PROFESSIONALS HAVE STUDIED IN AUSTRALIA

Schools	Professionals	Recent Grads
Monash University	740	345
UNSW	633	312
University of Melbourne	590	245
University of Sydney	571	257
RMIT University	562	295
Deakin University	428	255
Macquarie University	389	178
University of Technology Sydney	381	154
The University of Queensland	371	165
The Australian National University	303	128

Data Architect

- Australia currently employs 590 data architects, showcasing a significant gender disparity with only 16% being female, and a dominant 84% male representation.
- These professionals typically remain in their roles for an average duration of 1.5 years, hinting at possible career advancements or shifts in a relatively short span.
- The recruitment landscape reflects an intense, very high demand for data architects, emphasizing the growing importance and scarcity of architectural expertise in the data domain within the country.



16%
FEMALE



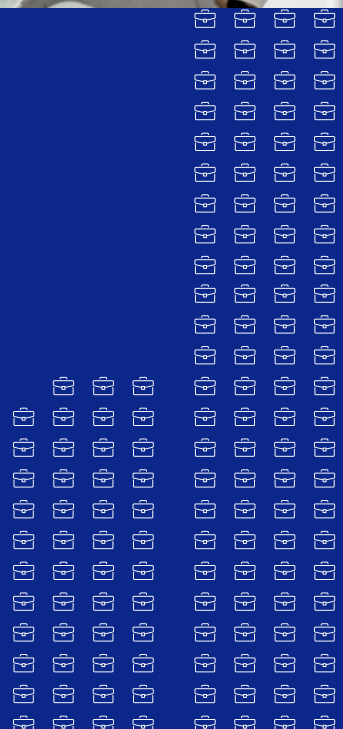
590
PROFESSIONALS

84%
MALE

126
CHANGED JOBS

1.5 YEARS
MEDIAN
TENURE

Professional are most likely to switch jobs



VERY LOW

LOW

MEDIUM

HIGH

VERY HIGH

HIRING DEMAND

This talent is **very hard to hire**

DATA ARCHITECT

Top Locations in Australia

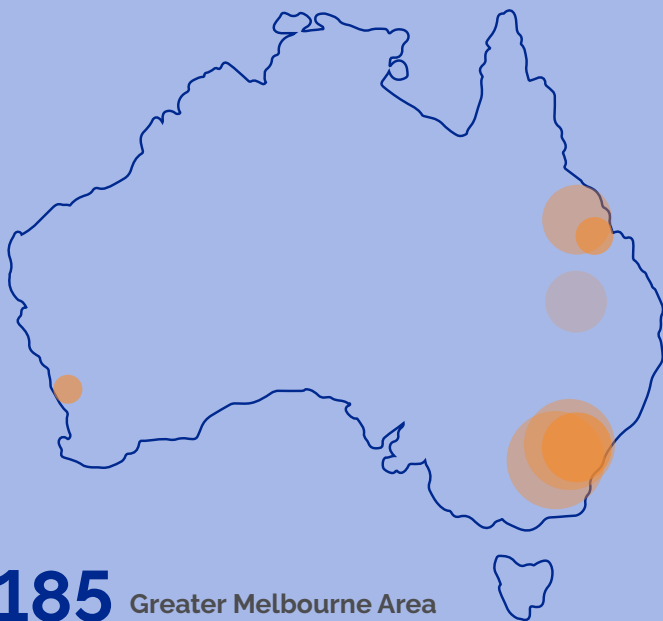
WHAT ARE THE TOP LOCATIONS FOR THIS TALENT?

- The prime urban hubs in Australia housing data architects are the Greater Sydney area, leading the pack with 220 professionals; the Greater Melbourne area following closely with 185; and the Greater Brisbane area, accommodating 52 of these specialists.
- These cities emerge as the central nerve centers for data architectural expertise in the nation.
- Across all three locations, there's an unmistakable and very high demand for data architects, underlining the pressing need for architectural insights in the rapidly growing data industry of Australia.



Market Area	Professionals	Hiring Demand
Greater Sydney Area	220	Very High
Greater Melbourne Area	185	Very High
Greater Brisbane Area	52	Very High
Greater Perth Area	41	High
Canberra, Australian Capital Territory, Australia	28	Very High
Greater Adelaide Area	14	High
Woolongong Area	6	-
Greater Hobart Area	5	-
Werribee South, Victoria Australia	5	-
Gold Coast	3	-

HIDDEN GEM LOCATIONS



185 Greater Melbourne Area

52 Greater Brisbane Area

41 Greater Perth Area

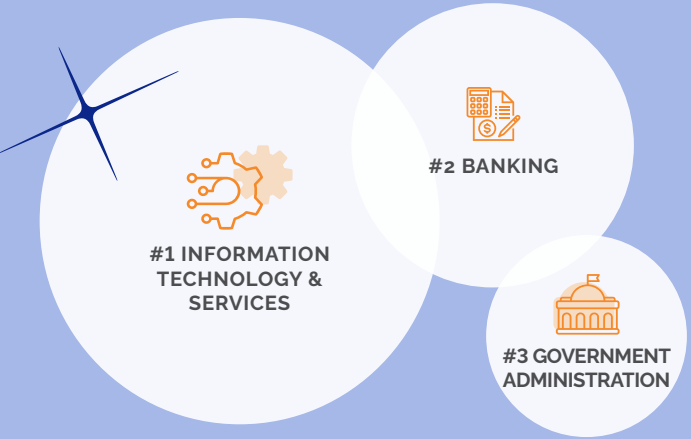
DATA ARCHITECT

Industry Sectors

WHAT INDUSTRIES ARE EMPLOYING THIS TALENT?

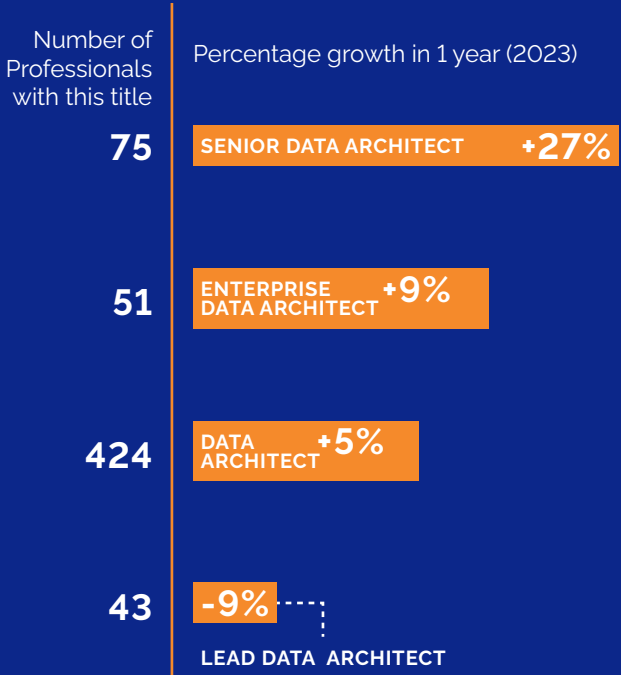
- The Information Technology & Services sector stands out in Australia's industrial landscape, employing 117 data architects and experiencing a high demand for their specialized skills. The Banking industry, with 61 data architects, echoes a similarly high hiring demand. Meanwhile, the Government Administration sector, accommodating 53 data architects, is experiencing an even more intense, very high demand for these experts.
- Beyond these primary industries, sectors such as Capital Markets, Insurance, and Management Consulting are witnessing a surge in hiring appetite, with a very high demand for data architectural expertise, highlighting a cross-sectoral recognition of the value that these professionals bring.

INDUSTRIES WITH TOP NUMBER OF PROFESSIONALS



Industry	Professionals	Hiring Demand
Information Technology & Services	117	High
Banking	61	High
Government Administration	53	Very High
Computer Software	46	High
Capital Markets	31	Very High
Insurance	28	Very High
Utilities	24	Moderate
Retail	24	High
Management Consulting	21	Very High
Higher Education	20	High

FASTEST GROWING TITLES AMONG THIS TALENT



DATA ARCHITECT

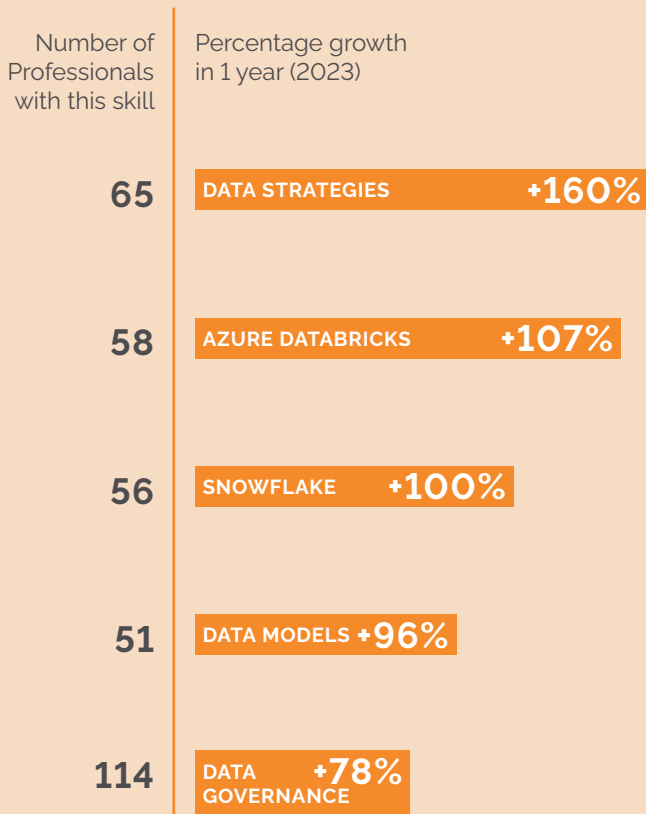
Industry Skills

WHAT ARE MOST COMMON SKILLS AMONG THIS TALENT?

- Central to the toolkit of data architects in Australia are foundational proficiencies in data warehousing, business intelligence, and SQL, serving as the bedrock of their professional expertise.
- However, in alignment with the evolving dynamics of the data landscape, newer competencies are gaining momentum rapidly. Skills like data strategies, Azure Databricks, and Snowflake are the rising stars in the field, hinting at the contemporary trends and the future trajectory of the data architecture domain.



FASTEST GROWING SKILLS AMONG THIS TALENT



TOP SKILLS OF THIS TALENT

Skills	Professionals	% of Total
Data Warehousing	360	61%
Business Intelligence (BI)	353	60%
SQL	347	59%
Analytics	320	54%
Solution Architecture	309	52%
Data Modeling	307	52%
Business Analysis	300	51%
Software Development	278	47%
Extract, Transform, Load (ETL)	266	45%
Requirement Analysis	259	44%

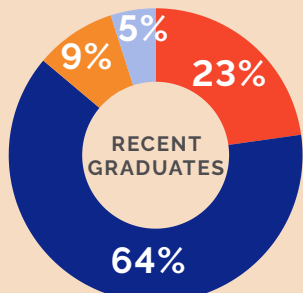
DATA ARCHITECT

Education of Data Architect

WHAT SCHOOLS ARE PRODUCING THIS TALENT?

- The academic landscape for data architects in Australia is marked by illustrious institutions. Monash University, the University of Technology Sydney, and RMIT University emerge as the leading alma maters for these professionals.
- In terms of their educational qualifications, a slight majority of 51% of data architects hold a Bachelor's degree. A substantial 35% have gone on to secure a Master's degree, while an impressive 10% have an MBA.
- Shifting focus to the newer cadre of graduates, there is a distinct preference for postgraduate studies. A staggering 64% of recent grads hold a Master's degree, while 23% have a Bachelor's degree. Additionally, 9% have ventured into the business domain, earning an MBA. This trend underscores the evolving academic leanings in the realm of data architecture.

% OF THE HIGHEST DEGREE THIS TALENT HAS ATTAINED



- BACHELOR'S DEGREE
- MASTER'S DEGREE
- MASTERS OF BUSINESS ADMINISTRATION
- DOCTOR OF PHILOSOPHY

SCHOOLS WHERE PROFESSIONALS HAVE STUDIED IN AUSTRALIA

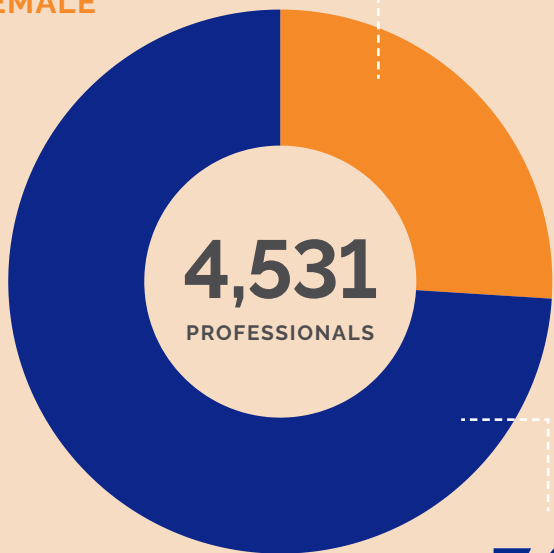
Schools	Professionals	Recent Grads
Monash University	39	4
University of Technology	23	1
RMIT University	22	4
University of Melbourne	22	1
UNSW	19	-
University of Sydney	13	1
Swinburne University of Technology	12	1
Anna University	12	-
The Australian National University	11	2
Macquarie University	9	-

Data Engineer

- Australia is host to 4,531 data engineers, revealing a gender distribution where 26% are female, overshadowed by a significantly larger male representation at 74%.
- These data engineering professionals typically have an average tenure of 1.3 years in their roles, suggesting potential career movements or progression opportunities in a relatively brief period.
- The recruitment landscape in Australia highlights a very high demand for data engineers, emphasizing the growing significance and need for these experts in the evolving data infrastructure domain of the country.



26%
FEMALE

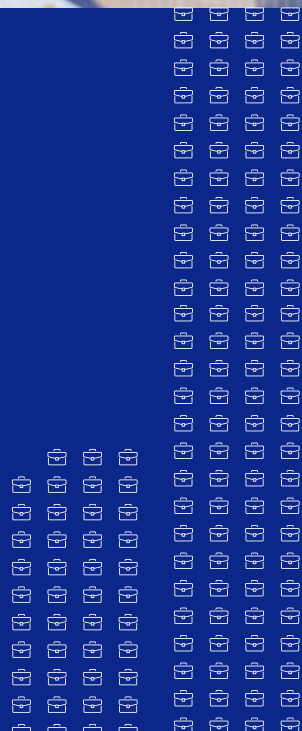


74%
MALE

1,342
CHANGED JOBS

1.3 YEARS
MEDIAN
TENURE

Professional are most likely to switch jobs



VERY LOW

LOW

MEDIUM

HIGH

VERY HIGH

HIRING DEMAND

This talent is **very hard to hire**

DATA ENGINEER

Top Locations in Australia

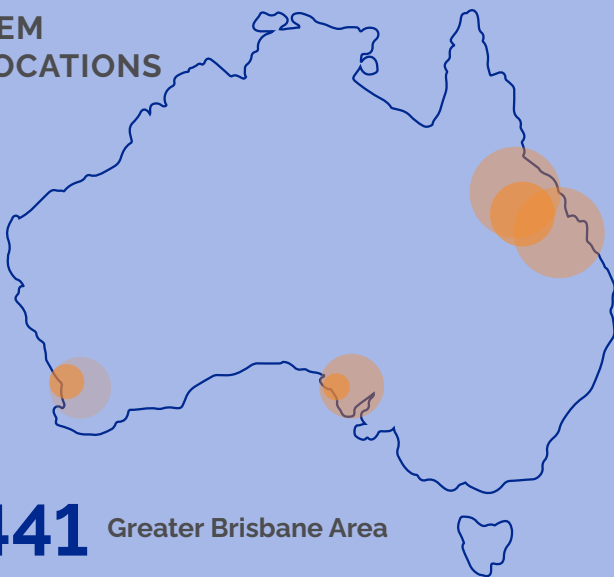
WHAT ARE THE TOP LOCATIONS FOR THIS TALENT?

- The major urban regions of Australia remain pivotal hubs for data engineering expertise. Leading the roster is the Greater Sydney area, housing 1,606 data engineers. Following closely is the Greater Melbourne area with 1,558 professionals, and the Greater Brisbane area, accommodating 441 specialists.
- These cities, with their concentration of tech industries and businesses, highlight the essence of data engineering within Australia's modern economy.
- Across each of these prime locations, the demand for data engineers is soaring, with all three cities registering a very high hiring appetite, reflecting the intrinsic value and scarcity of this specialized talent within the nation.



Market Area	Professionals	Hiring Demand
Greater Sydney Area	1,606	Very High
Greater Melbourne Area	1,558	Very High
Greater Brisbane Area	441	Very High
Greater Perth Area	337	High
Greater Adelaide Area	156	Moderate
Canberra, Australian Capital Territory	108	Very High
Gold Coast	40	High
Greater Newcastle Area	28	Moderate
Werribee South, Victoria, Australia	26	High
Greater Hobart Area	21	Moderate

HIDDEN GEM LOCATIONS



- 441** Greater Brisbane Area
- 337** Greater Perth Area
- 156** Greater Adelaide Area

DATA ENGINEER

Industry Sectors

WHAT INDUSTRIES ARE EMPLOYING THIS TALENT?

- In Australia's business landscape, the Information Technology & Services sector emerges as a principal employer for data engineers, with 873 specialists and a noted high demand for their expertise. The Banking sector, employing 530 data engineers, mirrors this high demand. Similarly, the Computer Software industry, with a cadre of 350 data engineers, is in the race with a marked high hiring appetite.
- Beyond these primary sectors, the hiring fervor for data engineering talent is even more pronounced in industries such as Capital Markets, Insurance, and Retail, where the demand is categorically very high. This cross-industry high demand underscores the universal recognition of the critical value data engineers bring to diverse sectors.



FASTEST GROWING TITLES AMONG THIS TALENT

Number of Professionals with this title

1,305

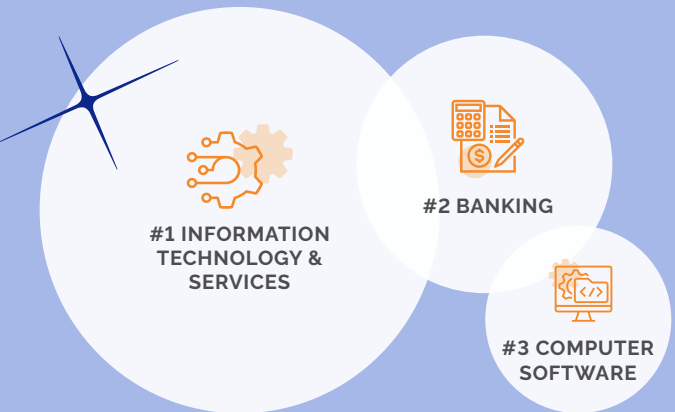
3,250

Percentage growth in 1 year (2023)

SENIOR DATA ENGINEER +10%

DATA ENGINEER +10%

INDUSTRIES WITH TOP NUMBER OF PROFESSIONALS



Industry	Professionals	Hiring Demand
Information Technology & Services	873	High
Banking	530	High
Computer Software	350	High
Government Administration	312	Moderate
Capital Markets	259	Very High
Insurance	188	Very High
Higher Education	173	Low
Retail	159	Very High
Utilities	142	High
Financial Services	141	High

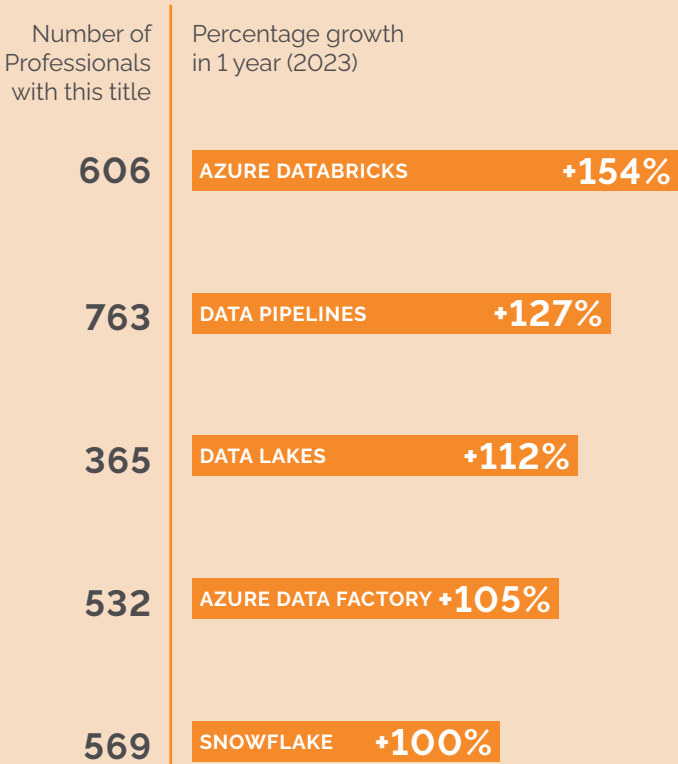
DATA ENGINEER

Industry Skills

WHAT ARE MOST COMMON SKILLS AMONG THIS TALENT?

- Core competencies for data engineers in Australia are anchored in SQL, Python, and data analysis, setting the foundation for their day-to-day professional endeavors.
- Yet, as the landscape of data engineering continues to evolve, there's a notable shift towards emerging proficiencies. Skills like Azure Databricks, data pipelines, and data lakes are fast gaining traction, indicating the innovative directions and tools that modern data engineers are increasingly adopting in response to industry needs.

FASTEST GROWING SKILLS AMONG THIS TALENT



TOP SKILLS OF THIS TALENT



Skills	Professionals	% of Total
SQL	3,265	72%
Python (Programming Language)	2,666	59%
Data Analysis	2,272	50%
Software Development	2,107	47%
Analytics	1,975	44%
Data Warehousing	1,809	40%
Microsoft SQL Server	1,795	40%
Extract, Transform, Load (ETL)	1,665	37%
Databases	1,591	35%
Business Intelligence (BI)	1,580	35%

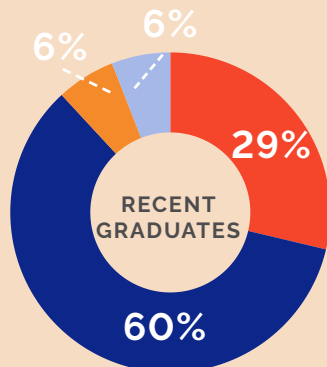
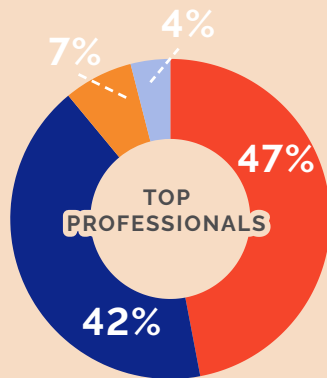
DATA ENGINEER

Education of Data Engineer

WHAT SCHOOLS ARE PRODUCING THIS TALENT?

- For data engineers in Australia, key academic foundations are often laid at renowned institutions. Monash University, UNSW, and the University of Melbourne stand out as the foremost educational pillars for these professionals.
- Surveying their educational accolades, 47% of data engineers have earned a Bachelor's degree, a close 42% have pursued further studies to secure a Master's degree, and a select 7% have ventured into the business domain with an MBA.
- When looking at the latest batch of graduates entering the field, there's a discernible inclination towards higher studies. A majority, 60%, of these recent grads are equipped with a Master's degree. Meanwhile, 29% hold a Bachelor's degree, and a consistent 6% have completed an MBA, showcasing the ever-evolving academic dynamics in the world of data engineering.

% OF THE HIGHEST DEGREE THIS TALENT HAS ATTAINED



- BACHELOR'S DEGREE
- MASTER'S DEGREE
- MASTERS OF BUSINESS ADMINISTRATION
- DOCTOR OF PHILOSOPHY

SCHOOLS WHERE PROFESSIONALS HAVE STUDIED IN AUSTRALIA

Schools	Professionals	Recent Grads
Monash University	346	191
UNSW	244	110
University of Melbourne	243	100
RMIT University	202	88
University of Sydney	165	74
University of Technology Sydney	134	54
University of Queensland	115	35
Queensland University of Technology	108	45
Swinburne University of Technology	106	34
Deakin University	102	54

Data Scientist

- Australia's ecosystem boasts of 3,606 data scientists, reflecting a gender dynamic where 28% are female and a notably larger proportion, 72%, are male.
- In their roles, these professionals generally have an average tenure of 1.4 years, suggesting career movements, advancements, or sector shifts within a relatively short span.
- The country's hiring scenario underscores a very high demand for data scientists, underlining the escalating importance and need for their expertise amidst the evolving data-driven backdrop of the Australian market.



28%
FEMALE

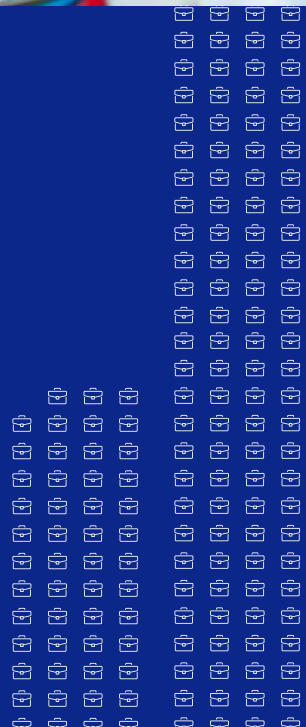


72%
MALE

845
CHANGED JOBS

1.4 YEARS
MEDIAN
TENURE

Professional are most likely to switch jobs



VERY LOW

LOW

MEDIUM

HIGH

VERY HIGH

HIRING DEMAND

This talent is **very hard to hire**

DATA SCIENTIST

Top Locations in Australia

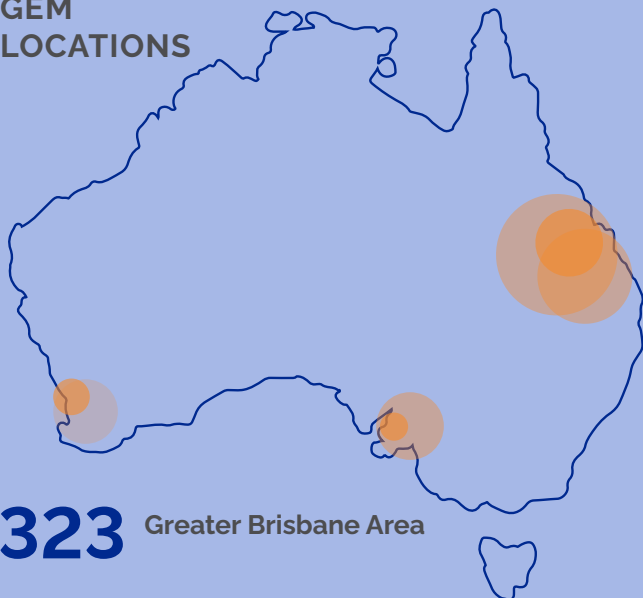
WHAT ARE THE TOP LOCATIONS FOR THIS TALENT?

- Australia's major metropolitan areas continue to be hubs for data science expertise. The Greater Sydney area leads with a substantial 1,231 data scientists. Not far behind, the Greater Melbourne area hosts 1,201 of these professionals. Meanwhile, the Greater Brisbane area is home to 323 specialists in the field.
- These urban centers, with their blend of tech industries, research institutions, and businesses, represent the heart of data science activity within Australia.
- The hiring pulse across all three locales is palpable, with each city echoing a very high demand for data scientists, reinforcing the pivotal role these experts play in Australia's data-driven future.



Market Area	Professionals	Hiring Demand
Greater Melbourne Area	1,231	Very High
Greater Sydney Area	1,201	Very High
Greater Brisbane Area	323	High
Greater Perth Area	302	High
Greater Adelaide Area	141	Moderate
Canberra, Australian Capital Territory, Australia	140	Very High
Greater Newcastle Area	24	High
Gold Coast	21	Low
Greater Hobart Area	14	Moderate
Werribee South, Victoria, Australia	13	Moderate

HIDDEN GEM LOCATIONS



323 Greater Brisbane Area

302 Greater Perth Area

141 Greater Adelaide Area

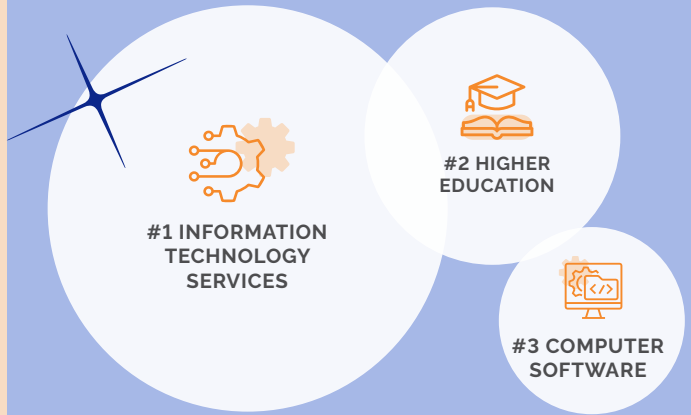
DATA SCIENTIST

Industry Sectors

WHAT INDUSTRIES ARE EMPLOYING THIS TALENT?

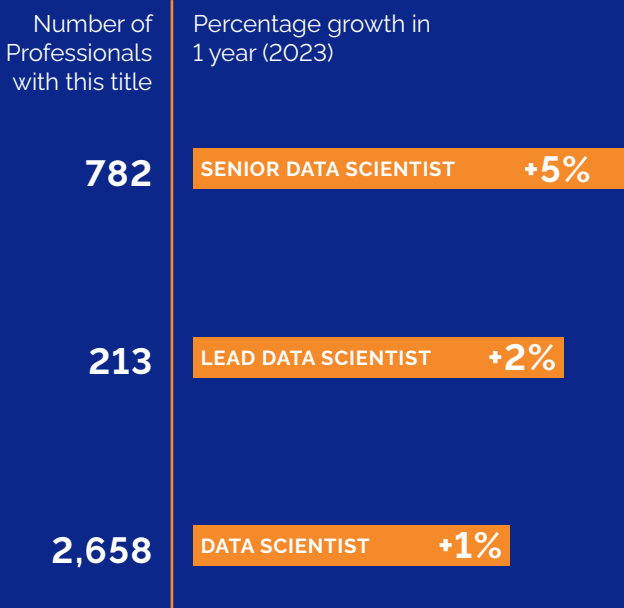
- Within the Australian industrial context, the Information Technology & Services sector stands out as a dominant employer for data scientists, hosting 590 professionals and reflecting a very high demand for their expertise. The Higher Education sector, while employing 366 data scientists, has a more tempered, moderate demand. Similarly, the Computer Software industry counts 309 data scientists among its ranks, also experiencing a moderate hiring appetite.
- Broadening the lens, other sectors, notably Banking and Retail, are showcasing an intensified search for data science talent, with both sectors echoing a very high demand. This illustrates the expansive and cross-sectoral impact of data science, revealing its growing significance in various corners of Australia's economy.

INDUSTRIES WITH TOP NUMBER OF PROFESSIONALS



Industry	Professionals	Hiring Demand
Information Technology & Services	590	Very High
Higher Education	366	Moderate
Computer Software	309	Moderate
Banking	280	Very High
Government Administration	272	Moderate
Retail	208	Very High
Mining & Metals	145	High
Internet	142	High
Research	136	Low
Utilities	113	High

FASTEST GROWING TITLES AMONG THIS TALENT



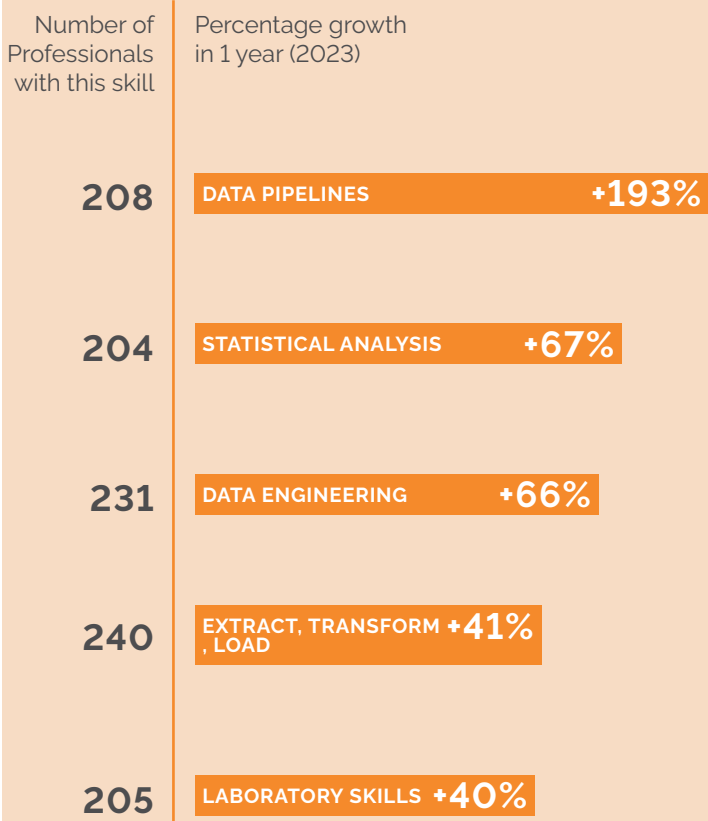
DATA SCIENTIST

Industry Skills

WHAT ARE MOST COMMON SKILLS AMONG THIS TALENT?

- At the heart of the data scientist's toolkit in Australia are the essentials: data science, Python, and data analysis, forming the core foundation of their professional undertakings.
- Yet, as the data domain continuously evolves, newer competencies are gaining prominence. The art of constructing data pipelines, expertise in statistical analysis, and the nuances of data engineering are the burgeoning skills. These reflect the shifting requirements and emerging trends in the realm of data science, signifying the adaptive nature of these professionals to the ever-evolving demands of the industry.

FASTEST GROWING SKILLS AMONG THIS TALENT



TOP SKILLS OF THIS TALENT

Skills	Professionals	% of Total
Data Science	2,652	74%
Python (Programming Language)	2,616	73%
Data Analysis	2,356	65%
Machine Learning	2,334	65%
SQL	2,142	59%
R (Programming Language)	1,875	52%
Analytics	1,608	45%
Data Visualisation	1,130	31%
Statistics	999	28%
Tableau	948	26%

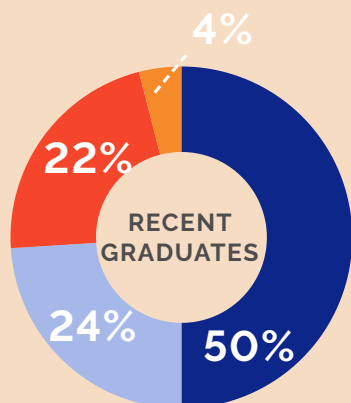
DATA SCIENTIST

Education of Data Scientist

WHAT SCHOOLS ARE PRODUCING THIS TALENT?

- For many data scientists in Australia, their academic journey often traverses esteemed institutions. Leading the way are UNSW, University of Melbourne, and Monash University, acting as major contributors to the country's data science talent pool.
- An examination of their educational accolades reveals a fascinating trend: 38% of data scientists come equipped with a Master's degree, a significant 33% hold a Doctor of Philosophy, and 24% possess a Bachelor's degree. This distribution indicates a notable emphasis on advanced studies within the profession.
- The fresh wave of graduates stepping into the field presents a similar narrative. A dominant 50% of these recent grads have secured a Master's degree, while 24% are distinguished with a Doctor of Philosophy, and a closely-following 22% have earned a Bachelor's degree, suggesting an ongoing trend towards higher academic achievement in the realm of data science.

% OF THE HIGHEST DEGREE THIS TALENT HAS ATTAINED



- BACHELOR'S DEGREE
- MASTER'S DEGREE
- MASTERS OF BUSINESS ADMINISTRATION
- DOCTOR OF PHILOSOPHY

SCHOOLS WHERE PROFESSIONALS HAVE STUDIED IN AUSTRALIA

Schools	Professionals	Recent Grads
UNSW	405	158
University of Melbourne	384	159
Monash University	384	194
University of Sydney	299	117
RMIT University	220	107
The University of Queensland	194	67
The Australian National University	166	45
University of Technology Sydney	156	70
Macquarie University	154	57
The University of Western Australia	133	64

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