**Industry Data**

**• What are the Job Titles for your group's ideal jobs? How do each of these rank in terms of demand from employers?**

**• From your group's ideal jobs, you can identify a set of skills required for these jobs (we will refer to this as your group's required skill set). These can be divided into general skills (communication, problem solving, writing etc) and IT-specific skills (Javascript, SQL, etc).**

**Name**: Joe Sharratt

**Ideal Job Title**: Team Leader (Intelligence Operations)

**Required Skillset**:

*General Skills*:

According to the Australian Federal Police (2021), a Team Leader in Intelligence Operations requires analytical and critical thinking skills as well as a sound understanding of the intelligence process as it relates to policing. Communication skills are also highly desirable, as is the ability to provide timely, written analysis to a wide range of stakeholders. Further, Intelligence Officers are expected to consistently display an ability to adjust to constructive feedback from both peers and supervisors.

My ideal role is fundamentally a management position, therefore strong leadership and interpersonal skills are required to ensure that my team is working efficiently, often under prolonged periods of stress.

*I.T.-Specific Skills*:

Any analytical role in the Australian Intelligence Community requires a working understanding of the I.T. industry. More specifically, an understanding of data analysis, management and visualisation are seen as fundamental considering the huge number of fragmented datasets that make up modern intelligence work. Further, an understanding of programming languages such as SQL, Python and/or Java are desirable as Intelligence Officers are increasingly required to work with (and occasionally build) simple, bespoke programs designed to collect and sort data from ‘open sources’ on the internet (Australian Government, 2021).

**Has Your Opinion of Your Ideal Job Changed? Why or Why Not?**

After reviewing the data providing by Burning Glass, my opinion of my ideal job has not changed. Despite my job title not being listed amongst Burning Glass’ list of ‘Top Job Titles’, I am encouraged by the high number of both general and I.T.-specific skills that are desired by both the Australian Federal Police and the I.T. industry at large. In particular, it was great to see SQL, JavaScript, and Python all feature on the Burning Glass list, and I will look to prioritise these skills to ensure that I am appropriately equipped to take advantage of a wide range of I.T. opportunities if I fall short of achieving my goals in the Australian Intelligence Community.

**References**:

Australian Government 2021, *Careers in Intelligence: Skills & Interests*, Viewed 4 Jan 2022 from, < <https://www.careersinintelligence.gov.au/what-we-do/skills-interests/analytics> >

Australian Federal Police 2021, *Intelligence Officer*, Viewed 4 Jan 2022 from, < <https://jobs.afp.gov.au/job-opportunities/details/intelligence-officer-7670> >

**Name**: Victoria Sabino

**Ideal Job Title**: Senior Software Engineer, Mobile Anti-Cheat at RIOT GAMES

**Required Skillset**:

*General Skills*:

A role like this certainly has a big impact on the company and so naturally there are responsibilities that comes along with it such as:

* Having the competency to develop software solutions to detect and prevent cheating,
* Being a good and reliable communicator to help game teams understand their specific security needs which in turn help sharpen their security layers,
* Having the ability to promote secure coding standards and design that reduces any chances of in-game cheating,
* Being fully prepared to keep up to date with new and/or possible cheating techniques that could arise,
* And lastly, have the capability to aid in identifying and establishing the possible impact that cheating could incur.

*I.T.-Specific Skills*:

The individual must have a minimum of 4+ years industry experience, has experience building a software using C/C++, Java, or Go, has deep technical knowledge of mobile platforms, and sound knowledge regarding building and deploying mobile apps or sdks. Note that it is quite desirable to have any experience with mobile building tools (Android SDK/NDK, Xcode, LLVM), is familiar with mobile application security models, being certainly familiar with mobile executable formats, reverse engineering, or binary exploitation, and container solutions such as Docker or Kubernetes.

**Has Your Opinion of Your Ideal Job Changed? Why or Why Not?**

My opinion of my ideal job hasn’t changed. It’s still in accordance with the area I want to focus my work on and who I want to work for. I know that I’m not capable of applying for it yet but it is most definitely something to look forward to and also something that would keep me motivated and thrive to the best of my ability to reach.

**References**:

Riot Games, Inc. All Rights Reserved., 2021. *Senior Software Engineer, Mobile Anti-Cheat.* [Online] Available at: <https://www.riotgames.com/en/work-with-us/job/2581706/senior-software-engineer-mobile-anti-cheat-los-angeles-usa> [Accessed 12 December 2021].

**Name**: Nelson Lay

**Ideal Job Title**: Cloud Architect

**Required Skillset**:

*General Skills*:

General skills required for a role like this are,

* Communication Skills to effectively articulate proposed solutions to all areas of the business
* Problem Solving skills for providing solutions in complex scenarios
* Organisational and Planning Skills to ensure projects are delivered in a timely manner.
* Presentation Skills to showcase and advocate proposed solutions to key stakeholders
* Ability to research the latest technologies to find the best-fit solution

*I.T.-Specific Skills*:

The skills required for this job are Cloud Networking skills, Programming, Database skills, Cybersecurity. Experience in cloud infrastructure tools such as Automation tools to provision, test deployment requirements, and Integration tools to integrate various solutions. A good working knowledge in Agile Project Delivery methodologies.

**Has Your Opinion of Your Ideal Job Changed? Why or Why Not?**

My ideal job choice has not changed. According to Burning Glass the top job title was a Solutions Architect, seeing it as the top job title has helped solidify my decision.

**References**: <https://www.accenture.com/au-en/careers/jobdetails?id=R00042913_en>

**Name**: Jordan Glen

**Ideal Job Title**: Algorithmic Trader

**Required Skillset**:

*General Skills*:

- Experience and knowledge of trading in the stock/shares markets

- Strong mathematical skills

- Education/experience in finance

*I.T.-Specific Skills*:

- IT and general computing

* + - Qualifications in programming

After completing my Uni degrees in IT and programming, my goal is to then get a job within the IT industry locally, or online, whilst I enrol in a course for quantitative programming and financial analysis. This should give me the qualifications I will need to obtain my dream job, whilst working in the IT industry will give me better job references.

**Has Your Opinion of Your Ideal Job Changed? Why or Why Not?**

I am still a little uncertain, but that is the advantage of the IT industry being so broad. Nevertheless, the broader category that it fits into (Software Development) is the general vicinity of where my dreams are focused on. I am an incredibly determined person, and often put enormous amounts of effort into topics I am passionate about.

**References**:

datacamp 2019, *Python for Finance: Algorithmic Trading*, viewed 16/12/21, <https://www.datacamp.com/community/tutorials/finance-python-trading>

Quantinsti 2021, *Making a Career in Algorithmic Trading*, viewed 16/12/21, <https://blog.quantinsti.com/making-career-algorithmic-trading/>

**Name**:

**Ideal Job Title**:

**Required Skillset**:

*General Skills*:

*I.T.-Specific Skills*:

**Has Your Opinion of Your Ideal Job Changed? Why or Why Not?**

**References**:

**Name**:

**Ideal Job Title**:

**Required Skillset**:

*General Skills*:

*I.T.-Specific Skills*:

**Has Your Opinion of Your Ideal Job Changed? Why or Why Not?**

**References**:

**Required Skillset**

Required General Skills Overview & Analysis:

Despite having chosen ideal jobs across a wide variety of sectors, the majority of our group’s ideal employers place problem solving, critical thinking skills, and communication skills as highly desirable. Likewise, there appears to be a strong demand amongst our group for high levels of adaptability, and a desire to remain on top of evolving industry trends. While all four members of our group share several common required general skills, there were a few outliers present. These included leadership skills, mathematics, and a sound understanding of the financial markets.

Interestingly, many of our group’s general required skills rank very highly in the list of ‘Top Generic Skills’ according to Burning Glass Technologies. More specifically, communication skills and problem-solving rank first and second respectively, with critical thinking skills also appearing further down the list.

Amongst the outliers listed by members of the group, industry research ranked 10th and leadership skills ranked 11th, while mathematics and knowledge of the financial markets failed to make Burning Glass’ list.

Required I.T.-specific Skills Overview & Analysis:

One of the few common threads amongst our group relating to required I.T.-specific skills is the desire to gain a solid understanding in a wide variety of programming languages, with C++, Java, Python, and SQL featuring in skillsets across the group. Aside from these programming languages, the required skills for our group are relatively broad. Some of these skills include database manage and analytics, knowledge of iOS and Android mobile platforms, cloud networking skills, and a working knowledge of cybersecurity. Further, slightly more specific skills have been listed including a desire to produce ‘agile project delivery methodologies’, and the promotion of secure coding standards.

As with the general skills outlined above, many of the I.T.-specific skills required by our group generally rank highly on the list provided by Burning Glass. In particular, our group’s strong focus on programming languages is a positive, with SQL, JavaScript, and Python all featuring on Burning Glass’ list. However, it is surprising that many of the skills listed by our group do not feature amongst Burning Glass’ list, including Database management, cloud computing skills and cybersecurity. Likewise, Burning Glass includes a large number of skills that are not required by our group at this moment, with the top three skills being Microsoft Windows, SAP, and Business Management.