# Team Profile

## Personal information

Van Nguyen  
Student #: s3824188

Van is an Australian of Vietnamese origin. He has previous commenced, but not completed, an Engineering degree. After working for a couple of years, Van instead decided to complete a Diploma of IT at Victoria University after it was pointed out to him by family that he spent a lot of time around computers.

Van developed an interest in Linux based systems after being introduced to it as a free, open-source operating system during his engineering degree. He enjoys disassembling and fixing a number of electronics such as desktop computers, laptops and Android mobile phones. As a result of his prior IT studies, Van has a number of IT skills at present mostly in web development and design, including php, bootstrap, SQL and python.

Minh Hau Truong  
Student #: s3859157

Minh is originally from Vietnam, and moved to Australia 8 years ago. He is a married father of a four-month-old boy which now takes up a lot of his time. He has previously completed an Advanced Diploma of Business Administration but after working in the relevant field found that the work did not suit him.

Spending a lot of time with computers when he was younger learning for school and studying a new language piqued his interest in information technology. He is also fascinated by the ongoing innovation and development of various technology products, be that the constant change of mobile phones from the bulky items of the 90s to the comparatively smaller but more feature rich ones of today, or the increasing use of robots and artificial intelligence to make life easier and more efficient. Minh has no prior IT experience.

Sisi Meng Shih Liu  
Student #: s3855898

An Australian of Chinese origin, Sisi moved to Hong Kong and currently works as an account manager that deals with the client facing aspects of various IT financing solutions. This occurred after beginning and then deferring a Bachelor of Arts at the University of Sydney / University of New England. She has a keen interest in wine, so much so that she completed a level 1 course at the Asia Wine Service and Education Centre, travel running, and Korean Culture. She is able to speak English, Cantonese and Mandarin, as well as Korean to a basic level.

She has no formal IT experience, but has worked closely with various teams for a number of years that has required some IT knowledge. Her interest in IT was sparked by her work and a desire to be able to better understand and explain the IT aspects of her job to clients. She hopes to one day transition into a technical related position.

Darren Miral  
Student #: s3858795

Born and raised in Melbourne, Australia to Sri Lankan immigrants, Darren is undertaking his second Bachelor Degree, having previously obtained one form Monash University in 2012. He has an intellectual curiosity regarding a number of subjects such as history, astronomy, chemistry and fine art and loves quiz shows.

Like many others, his interests in information technology stems from video games. He feels that his enjoyment of troubleshooting, both in the context of IT and elsewhere, would be put to good use in the IT field. Unfortunately, he has no IT experience prior to undertaking a Bachelor of IT degree from RMIT via OUA beyond building a PC and setting up a NAS on his home network to story multimedia files.

Malcolm Tsang  
Student #: s3333925

Malcolm was born in Australia and is of Chinese descent. Despite not being able to speak it, he is able to understand spoken Cantonese. Malcolm has previously completed a Bachelor of Mechanical Engineering at RMIT, and is a big sports fan – particularly of Australian Rules Football and soccer, where he supports Essendon FC and Manchester United respectively.

His interests in IT began with playing computer games against his brother and the fascination of how the technology and games constantly improved over time.  It is this innovation and constant improving technology that gets me interested into thinking what is next? Malcolm does not yet have any relevant IT experience.

## Team Profile and Ideal Jobs

Van Nyugen

* Myers-Briggs Type Indicator – ISFJ-T “Turbulent Defender”

Minh Truong

* Myers-Briggs Type Indicator – INFP “The Healer”
* Learning Style (VARK) - Tactile
* Big Five Personality Test – Extraversion 3, Agreeableness 45, Contentiousness 41, Emotional Stability 52, Intellect/Imagination 8

Sisi Liu

* Myers-Briggs Type Indicator – ISFJ-A “Assertive Defender”
* TestColor Personality Test – Energy 137; Intellectual Performance 116; Dynamism 111; Management Skills 109
* “Skills You Need” Interpersonal Skills Self-Assessment – 64% (“Interpersonal skills are about average compared to other people”)

Darren Miral

* Myers-Briggs Type Indicator - INTJ
* Learning Style (VARK) - Multimodal
* Big Five Personality Test – Extraversion 23, Agreeableness 52, Contentiousness 50, Negative Emotionality 29, Openmindedness 52

Malcolm Tsang

* Myers-Briggs Type Indicator – ISFJ-A “Assertive Defender”
* Learning Style (Emtrain Learning Style) – “Reflector”
* USC Leadership Style Test – “Contrarian Leader”

Despite its limitations, as the Myers-Briggs Type Indicator (MBTI) test is the only one consistent between all members of the team, it will form the basis of the analysis of how such testing might inform the group.

All five members are introverts according the MBTI, which will likely mean that each individual will need to actively communicate with each other to ensure their point of view is heard. The lack of any overtly extroverted members within the group will likely have both positives, such as it being unlikely for one person to be domineering and talk over the entire group, and negatives, especially in the event of a presentation. A number of these MBTI types are also associated with perfectionism. While an element of perfectionism can be a good thing, especially when it comes to group projects where it can be necessary to ensure things don’t “slip through the cracks”, too much perfectionism can hinder progression of the project if the team becomes fixated on less important tasks. That all three types are considered to be dedicated and hard-working bodes well for the group as it is unlikely that there will be members who do not contribute sufficiently. This also means that it is less likely that team members may develop frustrations with another due to a perceived lack of input.

Within this team of five people, there are only two that declared their “ideal job” to be the same one, with both Malcolm and Minh desiring to become software engineers. Van, with his previous experience with Linux systems, hopes to become a Linux system administrator while Sisi aims to become a cloud engineer, which stems from her prior work history. Lastly, Darren has listed his ideal job as a network engineer. Between the five jobs, Linux system administrator and network engineer have the most similarities between them with both dealing with setting up, maintaining and troubleshooting computers and the networks they are connected to, although they are considered to be at different levels and therefore require differing levels of experience (Ali, 2018; Fieldengineer.com, 2019). It can be argued that the job of a cloud engineer can be similar to either that of a network engineer, as they can be required to both manage cloud network (Stewart, 2019), or of a software engineer, designing and implementing software to suit the needs of their client (Intellipaat Blog, 2019), depending on their specific role. The role of software engineer can also be quite varied depending on what is required by the job and/or client, but generally involves designing, developing and creating various software implementations, either at the application or system level (Indeed.com, 2019). Across the group, the majority have listed “ideal jobs” that require a moderate degree of experience beyond a Bachelor’s Degree.

Ali, M. (2018). *Network Engineering Description & Definition*. [online] Fieldengineer.com. Available at: https://www.fieldengineer.com/blogs/what-is-network-engineer-definition [Accessed 14 Apr. 2020].

‌Fieldengineer.com. (2019). *System Administrator | Description, Salary, Job Role & More*. [online] Available at: https://www.fieldengineer.com/skills/what-is-a-system-administrator [Accessed 14 Apr. 2020].

‌Stewart, M. (2019). *What Is a Cloud Engineer? What I Do and How I Got Here*. [online] Default. Available at: https://www.comptia.org/blog/what-is-a-cloud-engineer [Accessed 15 Apr. 2020].

Intellipaat Blog. (2019). *What Does a Cloud Engineer Do? - Roles and Responsibilities - Intellipaat*. [online] Available at: https://intellipaat.com/blog/what-is-cloud-engineer-roles-responsibilities/ [Accessed 14 Apr. 2020].

‌ Indeed.com. (2019). *Learn About Being a Software Engineer | Indeed.com*. [online] Available at: https://www.indeed.com/career-advice/careers/what-does-a-software-engineer-do [Accessed 14 Apr. 2020].

# Tools

Several applications have been used by the team members to facilitate the completion of this group project.  These include the creation of a group website through Github Pages, which can be found at the following link:

<https://darrenmiral.github.io/OmegaRuby/>

The Github repository for this website can be found here:

<https://github.com/DarrenMiral/OmegaRuby>

Most of the group’s discussion has been conducted using the well-known collaboration software Slack (Slack, 2019) to enable real time communication between team members despite living in different cities and time zones.  Several screenshots of conversations held on this software have been provided to illustrate how the group has worked together (see Appendices 1-4).

Other tools used to generate this group report include Microsoft Office; EndNote, for reference management; and OneDrive.

Van created the Slack channel and the rest of the team members soon joined and began communicating well with each other, quickly setting up a time where all would be available to discuss in real time how the group would tackle the project.  This first meeting, and subsequent meetings, were quite constructive and with minimal disagreements.  We believe that these screenshots provide an accurate representation of how the group worked and show that everyone contributed to the preparation of this report.

Slack (2019). *Where work happens*. [online] Slack. Available at: https://slack.com/intl/en-au/ [Accessed 15 Apr. 2020].

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# Industry Data

The specific job titles of the group’s ideal jobs are as follows:

* Van Nguyen – Technical Support and Server Administrator
* Minh Hau Truong – Senior Software Engineer
* Sisi Liu – Cloud Engineer
* Darren Miral – Network Engineer
* Malcolm Tsang – Software Engineer

These jobs form a wide-ranging group, both in seniority, scope and desirability. Looking at the dat from early 2018 provide from the Labor Insight Tool by Burning Glass Technologies (Burning Glass Technologies, 2018) can be confusing for a number of reasons. Due to there being no agreed upon taxonomies for job titles (Korbel, 2018), this results in a number of very similar jobs being listed in separate categories in the data. As the data is taken from job advertisements from a number of places including popular job vacancy websites and directly from employer’s websites, and that the same job being listed in multiple locations results in it being counted multiple times (Korbel, 2018), this can also lead to a misleading number of jobs appearing. Despite these potential pitfalls in the data, it is clear that roles similar to software engineer are in high demand, as evidenced by it being the top occupational group within the Burning Glass “Top Occupations” data set for Information Technology jobs and having twice as many job listings as the next group. Systems administrators also appear to be in high demand, with that job title being the third most common in the same data set. Network engineer does not place as highly in the list of “Top Occupations”, coming in in 15th place, although still with a healthy number of jobs, especially considering it is a more senior position than a number of the jobs found above it on the list. Cloud engineer does not appear on either the “Top Occupations” or the Burning Glass “Top Titles” lists, however it does appear to be a rapidly growing sector, at least in the United States of America, based a rapid growth in both job searches and employer interest in people with Cloud-based skills according to jobs website Indeed (DeNisco Rayome, 2018).

Coalescing the IT-specific skills of the group’s ideal jobs into one skill set is a difficult one due to the diverse nature of the jobs and the resultant job-specific knowledge, skills and languages required. Despite that, the majority of the jobs listed knowledge of Python, Java and database knowledge such as SQL, while multiple listings included OpenStack, Oracle and Linux skills as requirements. Taking these six IT-specific skills, and comparing those to the Labor Insight data from Burning Technologies, it is clear that SQL and Java are both very highly sought-after skills as they are the top and third-top listed skills in demand. Linux, Oracle and Python also feature in the list of the 23 most in demand skills at that particular point in time. OpenStack was not included in the list, but this may be due in part because of the relative newness of cloud computing being seen as desirable in the workplace.

Beyond specific IT skills required for any job, a number of baseline skills are also clearly desired by potential employers when looking at the Labor Insights data by Burning Glass. Team work, problem solving and communication were common to almost all of the listed “ideal jobs”, with some further specifying that communication with clients being particularly important. Time and task management skills were also listed multiple times, along with reliability, motivation and leadership. The Labor Insights data clearly shows good that communication is the most in-demand skill within the information technology industry, and this may be due in part to a desire to avoid the stereotype that exists in the general public about those in the industry. Problem solving, organisational skills and team work/collaboration with the second, third and fifth most requested generic skills in advertisements in the given time period.

Looking at the data provided there are a number of skills that ranked highly with employers within the sector that do not fall within the sphere of skills required by the group. These include JavaScript (and by extension other web development skills), Microsoft Windows and “project management”. Given the high ranking of technical support and customer support on the list of IT-specific skills, what appears to be a very generic skill requirement of Microsoft Windows likely refers to the maintenance and support of systems using the popular operating system, particularly in relation to job advertisements for level 1 technical support and system/network administration positions. Project management is arguably not an information technology industry specific skill given it was the sixth most mentioned flagship skill of all job advertisements in the United States in 2018 (Stack et al., 2019), but given it combines the sought-after generic skills involving communication, team work and organisation, it easy to see how it would be so highly ranked. Writing, detail-oriented and creativity were the three highest ranked generic skills according to the Labor Insight data that would not be part of the group’s job requirements, although writing was listed in at least one of the individual job advertisements selected. Creativity as a job requirement in the context of the IT industry likely most applies to those wishing to work in website development or graphic design, and as this is not the desired career path of any of the group is it understandably not of the group’s required skills.

After reviewing the data, there does not appear to be cause for any of the members of the team to have already changed their opinion of their ideal job. Two of the ideal jobs chosen (system administrator and software engineer) between three of the team members were within the three “top occupations” in the industry, and a fourth, in cloud engineer, was chosen with full knowledge that it is seen as a growth area 2018 (Stack et al., 2019). That the fifth of the ideal jobs within the group, that of network engineer, was not particularly highly placed could be seen as some cause for concern as to the demand or viability of the career into the future, but this can be explained by its relative seniority to other jobs within the data set. Further investigation using more recent job advertisement data, and potentially anecdotal data by those currently employed in positions similar to cloud engineer and network may be warranted to further elucidate whether the reasons given for the lower apparent demand for these jobs hold true.

Burning Glass Technologies. (2018). *Labor Insight | Real Time Job Market Data*. [online] Available at: https://www.burning-glass.com/products/labor-insight/ [Accessed 9 Apr. 2020].

DeNisco Rayome, A. (2018). *15 most in-demand cloud computing jobs*. [online] TechRepublic. Available at: https://www.techrepublic.com/article/15-most-in-demand-cloud-computing-jobs/ [Accessed 15 Apr. 2020].

‌Korbel, P. (2018). *Internet job postings: preliminary skills analysis Internet job postings: preliminary kill l i*. [online] *National Centre for Vocational Education Research*. Available at: https://www.ncver.edu.au/\_\_data/assets/pdf\_file/0023/2931440/Internet-job-postings-preliminary-skills-analysis-technical-paper.pdf [Accessed 15 Apr. 2020].

‌Stack, R., Kaufman, E., Kotsis, A., Sigelman, M., Restuccia, D. and Taska, B. (2019). *What’s Trending in Jobs and Skills*. [online] https://www.bcg.com. Available at: https://www.bcg.com/publications/2019/what-is-trending-jobs-skills.aspx [Accessed 17 Apr. 2020].

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# ‌Group Reflection

## Darren Miral

Initially I was quite apprehensive about the group for three main reasons. Firstly, because it was formed pretty late by people. Secondly, because it was made up of people not in my class so I was unable to ascertain prior to joining whether they were active members of the subject, and thirdly because group work in university is notorious for potentially being difficult. However, after the first meeting of the group on Slack many of my concerns were allayed as the group appeared engaged, had a similar plan to attack the assignment and it wasn’t too difficult to delegate tasks fairly evenly. The fact that nobody had to be coaxed into a leadership position to make decisions for the group was also a plus. As a group we did have a significant amount of trouble devising a group project to undertake for A3, but I believe that it was well handled by all. After reviewing the work contributed by the rest of the team, I am fairly confident that this group can and will work well for the remainder of the study period as required.