# My Profile

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GitHub Repo : https://github.com/repellent-ghoul/A1

GitHub Pages: https://repellent-ghoul.github.io/A1/



I was born in Shepparton. A country town 180km northeast of melbourne. Shepparton is part of the Goulburn valley and is known for its surrounding orchards and dairy farming.It is also home to the food manufacturer SPC I come from an Italian background. Which means my love of pizza is strong. I have been a gamer since I was a child and still continue to enjoy games now. I've also been a musician most of my life and played professionally for a number of years. Mostly Spanish/latin inspired music but also played in metal and rock bands. I've included a picture of Emily(my partner) and myself on our 2018 holiday in Mexico. I like to take holiday photos on an old film camera I have (hence the grainy quality of the picture). I really enjoy the look of film and it's the one piece of technology in my life that I refuse to upgrade :D

**• What is your interest in IT? When did your interest in IT start? Was there a particular event**
**or person that sparked your interest? Outline your IT experience (if any).**

My interest in IT began when we got our first family computer. I can't remember the hardware specs but I remember it was running windows 95 and we had a copy of Microsoft Dangerous Creatures. My sister and I would spend hours using the program to learn about all the dangerous creatures in the world. There was also a dialogue driven story game that I really enjoyed and that game ignited my passion for video games. Being a gamer has kept me interested in technology and all the latest tech. In my current and previous jobs, I have always been the unofficial tech support. I enjoy troubleshooting problems and find it really rewarding once a solution has been discovered. My main motivation for taking this course would be so that I can land an entry level job in a technical support specialist role. This would be my way into the industry so that I can gain experience and then work towards a development role. I find extended reality(XR) fascinating and would love to discover more about it.

**• Why did you choose to come to RMIT?**

I've always been interested in the development of apps for AR/VR and use of them in the workplace or education. When I saw an article about how RMIT had partnered with Microsoft to develop a course focused on games and graphics programming for mixed reality designers and programers it really got me thinking about going back to study. The opportunity to work with hardware like the hololens is something I'd one day like to do. I think it's exciting to be surrounded by like minded people who share the same interests as me and be inspired even more so by the world of IT. Collaborate with others on interesting, fun and exciting projects.

**• What do you expect to learn during your studies?**

I expect to learn the fundamentals of IT and the ways to to begin a career within the industry. Also better insight into what jobs are out there. I feel like while I know a lot of the common jobs available for IT professionals, there are a ton I wouldn't have even thought about. I'm hoping this course will give me a clearer idea of what's available out there and develop my skills accordingly.

**Ideal Job**

Find an advertisement showing what you believe to be your ideal job. This may require several years of experience, and hence be something that you must work towards, rather than something that you are ready for now, or will be able to fill as soon as you graduate. There are various ways to search for IT jobs, including websites like {seek.com.au}. You should include the following information.

• The job advertisement itself. Include a link, and a snapshot of it (in case the link expires before the assignment deadline).

https://www.seek.com.au/job/52416766?type=standard#searchRequestToken=e78dcc5a-d 98d-481d-8259-dab661b15a3b

# Senior XR developer (Unity)

Flaim Systems

Melbourne  •  CBD & Inner Suburbs

Information & Communication Technology  •  Developers/Programmers

Full Time

Posted 6d ago

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Flaim Systems are looking for a talented and enthusiastic Senior XR developer who is passionate about delivering cutting edge XR experiences with real world applications. You would be joining a small team of 8 developers working across a suite of products based primarily around immersive training in the fire fighting and first responder fields.

Our approach is novel in the training space in that we leverage custom hardware solutions to immerse the trainees in their environment to provide a feel for the real world hardware they will be using.

Your role would be to work on existing products to help extend the feature set and tools, lead and train more junior developers, and depending on your capabilities there are plenty of shaders, DOTS and networking tasks.

The role will initially be remote until we locate a new office space near the CBD at which time the role will switch to on-site and remote.

We offer competitive rates and we don't crunch, we plan effectively.


## KEY KNOWLEDGE AND SKILLS NEEDED FOR THE ROLE.

- C# Programming with Unity3D.
- XR knowledge.
- Ability to work autonomously and remotely.
- Enthusiastic about creating cutting edge solutions to real world problems.
- Clear communication and sharing of ideas.
- Ability to provide realistic timeframes for tasks and revise when necessary.

## EDUCATION/QUALIFICATIONS

- Computer Science/Games Programming degree or equivalent industry experience.

## EXPERIENCE

- At least 4 years in programming/software engineering.
- Demonstrated experience with the Unity game engine.
- Demonstrated experience/skills with C#.
- Demonstrated experience with developing tools within Unity.
- Has delivered completed commercial products.

## HIGHLY DESIRABLE

- XR experience across a variety of platforms
- Experience delivering training products
- Cross platform development (mobile/iOS, VR, desktop).
- Technical art experience
- DOTS experience
- Networking/Multiplayer experience
- Unity audio systems

**• A description (in your own words) of the position, and particularly what makes this position appealing to you.**

Flaim systems are looking for an experienced XR developer to develop real world applications. They create virtual environments that mimic real world situations for the purpose of training people. I love gaming and I think the use of this technology in the training space is a very exciting concept. The use of a modified Microsoft hololens in the military is what initially sparked my interest in mixed reality. I would like to explore this research and development further and potentially work in developing these types of applications.

**• A description (in your own words) of the skills, qualifications and experience required for the position.**

Being a senior role they want someone with a lot of experience. The degree doesn't seem to be necessary if the applicant has the relevant experience and portfolio of previous projects they have worked on.
They obviously develop their apps in Unity because they have focused on finding someone who has knowledge and experience with Unity engine and the C# language (which is used in Unity) They also want someone who has worked with extended reality(XR). They also require someone who has completed and released a commercial product. the ability to work without supervision, a passion for this particular kind of work, good communications skills, able to produce within reasonable time frames.

**• A description (in your own words) of the skills, qualifications and experience you currently have.**

I have 10+ years working in customer service with 4 years in managerial/supervisor roles. Below is a list of some skills I have acquired over the years.
• Excellent documentation skills and ability to communicate effectively with technical and non-technical audiences

• Software Troubleshooting & Problem Solving.

• Strong interpersonal skills and the ability to work/learn as part of a team in a challenging and fast paced environment
• Excellent customer service in face-to-face, telephone or electronic interaction with clients, good language and communications skills
• Proficient in Windows & Mac OS operating systems
• Hardware installation and software deployment

**• A plan describing how you will obtain the skills, qualifications and experience required for the position, building on those you have now. This need not be greatly detailed, (and will probably change significantly over time anyway), but try to be as specific as you can.**

I would spend more time using Unity to develop more games and become a more proficient programmer. I would like to invest in a VR headset and even a Microsoft Hololens one day so I can develop these projects in my spare time. If I could put together a portfolio of the work I have created it would be a good step in the right direction to getting a job in the field.
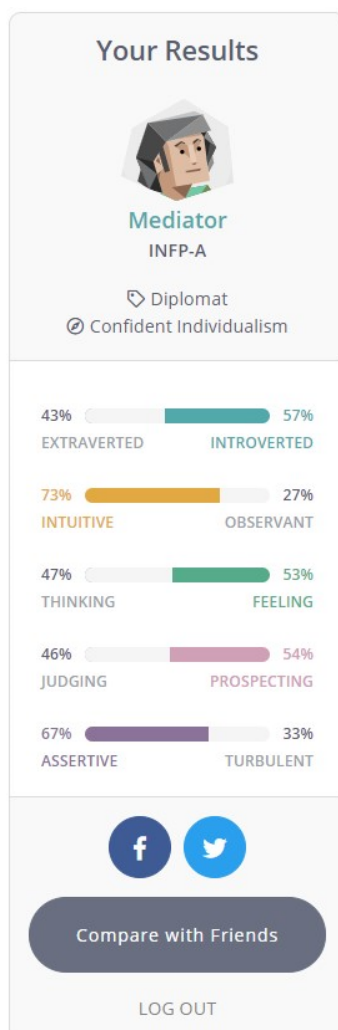
**Personal Profile**

There are a number of online tests that are commonly used by employers to get specific information about potential employees. One of the best-known of these is the Myers-Briggs Type Indicator (MBTI) test, which was developed by the mother-and-daughter team of Isabel Myers and Katharine Briggs. Another popular one (and very relevant to students) is about learning styles.

There are various other tests available online as well, and while there is no guarantee that any specific test will be necessarily one that you will encounter in your career, it seems highly likely that you will have to do some kind of test like this as part of a recruitment process.

Accordingly, you are required to present the following information:

• The results of an online Myers-Briggs test. www.16personalities.com

## 16 personalities test results:

### Your Results

Mediator
INFP-A

🏷 Diplomat
⊘ Confident Individualism

| | | |
|---|---|---|
| 43% EXTRAVERTED | | 57% INTROVERTED |
| 73% INTUITIVE | | 27% OBSERVANT |
| 47% THINKING | | 53% FEELING |
| 46% JUDGING | | 54% PROSPECTING |
| 67% ASSERTIVE | | 33% TURBULENT |

Compare with Friends

LOG OUT

I found this test to be the most comprehensive and the results were surprisingly accurate. The strengths were pretty accurate and I related to a lot of what it said. I'm empathetic and hate the idea of hurting anyone. I can be generous and want to share the good things with the people closest to me. I'm open minded and will never judge anyone on their beliefs or lifestyle. I've always been interested in art, from being a professional musician to painting in my spare time. I'm very passionate about ideas that capture my imagination. Idealistic in the sense that I always try to do the right thing. I always try my best to contribute to society even if it's only in a small way.

My weakness, although hard to swallow, did ring true. I can be unrealistic in my expectations which can leave me feeling disappointment when things fall short. I can be reluctant in putting myself out there and making new friends. I can tend to be unfocused and find it hard to structure my ideas. I can absorb other people's negative moods or attitudes which affect my mood. It can bother me if someone dislikes me and I'll often try and fix the issue. Lasty, and the one that stands out the most for me is being self-critical. I can have unrealistic expectations for myself and when I don't live up to them it can cause me to abandon the project or idea completely.

**Learning Style Results**

**Solitary Learning Style**

*You're a solitary learner! You prefer to work alone and use self-study to learn new material. You like to focus your thoughts on the material you are learning and like to assess your thoughts, strengths and weaknesses.*

*Solitary learners should:*

*• Set your goals and plans and understand the reason for each goal. Align your goals with your personal beliefs and values.*

*• Create a personal interest in your topics.*

*• Reflect on personal experiences and feelings in relation to what you are studying. This can help you remember the content and enables faster recall.*

*• Create a study space without noise, distraction and interruptions. You tend to be most productive when nothing interferes with your concentration.*

*• Keep a journal alongside your materials to help you clarify ideas and concepts. You can use the journal to document your feelings and observations. This may help you find meaning in the work you are studying. If you are open to exchanging ideas online, publishing a web journal may be beneficial.*

*• Keep a portfolio – this allows you to reflect on and critique your previous work. Include a self-assessment of the strengths and weaknesses of your work. This will provide insight on areas you can improve on.*

I don't 100% agree with the results here as I believe depending on the material I'm learning, it can dictate whether or not I would like to do it alone or with other people. I really like to bounce ideas off people and get feedback when it's in a creative environment. I think the tips and advice could be useful for anyone currently studying.

# Big 5 Personality Test

**Results summary**

Your results from the IPIP Big Five Factor Markers are in the table below. The table contains a raw score and also a percentile, what percent of other people who have taken this test that you score higher than.

| Factor | Factor label | Raw score | Score percentile |
|---|---|---|---|
| I | Extroversion | | 22 |
| II | Emotional stability | | 39 |
| III | Agreeableness | | 67 |
| IV | Conscientiousness | | 80 |
| V | Intellect/Imagination | | 46 |

Big five personality trait scores calculated by openpsychometrics.org

## Trait descriptions

| Factor I | Factor II | Factor III | Factor IV | Factor V |
|---|---|---|---|---|

**Factor I** was labelled as **Extroversion** by the developers of the IPIP-BFFM. Factor I is sometimes given other names, such as Surgency or Positive Emotionality.

Individuals who score high on Factor I one are outgoing and social. Individuals who score low tend to be shut ins.

## Trait descriptions

| Factor I | Factor II | Factor III | Factor IV | Factor V |
|---|---|---|---|---|

**Factor II** is labeled as **Emotional Stability**. Factor II is often referred to by other names, such as Neruoticism or Negative Emotionality (in these two cases interpretations are inverted, as Neruoticism and Negative Emotionality can be though of as the opposite of Emotional Stability).

## Trait descriptions

| Factor I | Factor II | Factor III | Factor IV | Factor V |
|---|---|---|---|---|

**Factor III** is labeled as **Agreeableness**. A person high in agreeableness is friendly and optimistic. Low scorers are critical and aggressive.

## Trait descriptions

| Factor I | Factor II | Factor III | Factor IV | Factor V |
|---|---|---|---|---|

**Factor IV** is labeled as **Conscientiousness**. Individuals who score high on this factor are careful and diligent. Low scorers are impulsive and disorganized.

## Trait descriptions

| Factor I | Factor II | Factor III | Factor IV | Factor V |
|---|---|---|---|---|

**Factor V** is labeled as **Intellect/Imagination**. This factor is also often called **Openness to Experience**.

People who score low tend to be traditional and conventional.

The results here are similar to the 16 personalities test. I was surprised with how extreme factor 1 was. The rest seem pretty inline with the other tests. Perhaps I was in denial with my introverted personality traits. There is some stigma around introverted people and maybe that the problem.

**• What do the results of these tests mean for you?**

I thought the results were pretty informative and gave a lot of insight into my personality and traits. Having a busy lifestyle, you don't really get the chance to reflect on your own personality or traits so I found it enjoyable to read, even though it did highlight a lot of my weaknesses. I think these tests can shed some light into one's personality, however I also think the results can be vague and relatable to just about everyone. It has definitely given me time to reflect on myself and given me better insight into how my personality might influence my behaviour in a team environment.

**• How do you think these results may influence your behaviour in a team?**
It has made me reflect on certain aspects I recognise in myself and created more awareness of the way I behave. Perhaps when I recognise certain traits (in action) I'll take note of it and try to correct any negative behaviours. It will also make me reinforce positive behaviours I can display.
Mediators value input from everyone and encourage people to share their ideas. I think this is a great benefit to any team.

**• How should you take this into account when forming a team?**

With the information I've learnt from the tests, Ideally I would want to form a team full of people that complement each other's personalities, traits and learning styles.
That would be nice, but in the real world you generally don't get to choose your colleagues or team members. I think all I can do is use the info I've gained about myself and adapt to whatever team environment I may find myself in.

**Project Idea**

You are to write a report of around 1000 words describing your IT project idea. You should describe the project itself, as well as why you think it is important or interesting, and any potential drawbacks or obstacles you anticipate.

What are you passionate about? What kind of IT innovation would you like to see? What project will help you develop the skills, experience and knowledge required to make you qualified for your ideal job?

You need not have full answers to any of these questions, but you are required to have some ideas about an IT project that you think will address at least one of these questions. It may not be possible to find one that answers all three, but it is quite likely that something you would find interesting or useful will have a similar effect on others.

There are several possible types of projects that you may consider. Some potential ideas are below; others will be discussed in the following weeks:

• Developing a game using tools such as Unity, Construct2 or Cocos2d.

• Developing a smartphone app, using whatever programming language in which you have expertise, or by using tools such as MIT App Inventor.

• Finding an innovative application for new hardware developments, such as Raspberry Pis, Arduinos, Makey Makeys, small robots or related technologies.

• Creating a FAQ and implementing it as a chatterbot, possibly involving speech-to-text and text-to-speech software.

• Building an electronic artefact such as a model for Minecraft or similar games, along the lines of the United Nations Block by Block project.

This should not only describe what the project would be, but also why you think it is important or interesting, and what potential drawbacks or obstacles you anticipate.

The project idea that you put forward should have elements of originality and innovation, it does not have to be re-inventing the wheel - but isn't to be cloning an existing product or service and doing a minor change.

Note: There are to be significant tangible artifacts towards the project completion that are delivered by the submission of ASSIGNMENT 3, so keep this in mind when brainstorming your IT Project Idea – Feasibility is a key factor.

There isn't a set expectation of complexity to the project you select and explore, and it doesn't necessarily have to be something commercially viable, but, perhaps aiming for such could help you settle certain questions or help form your own (and tutors/graders) perspectives towards it.

Your description should include the following sections. The word counts below are recommendations only not absolutes but are a good guide of a minimum.

**Overview (100 words) - This should be a summary of what the project will be.**

Ice Scream is a 2D platformer developed with Unity. The game is focused around our main protagonist, a frightened ice cream who was accidentally dropped by the local ice cream man and now needs to make it back to the fridge before he melts. The world is a very hostile place for our poor little ice cream. The hot sun is beaming down towards earth and is rapidly melting our hero. In order to survive they must navigate through the environment by conquering increasingly difficult obstacles. They also have to contend with the hungry neighbourhood children and their vicious dogs, who want nothing more than to eat him up. During this journey they will meet other weird and wonderful characters that could help or hinder our heroes journey back to the safety of the fridge.

Given the scope of the project, I think a realistic goal would be to achieve a playable demo or alpha build rather than a fully developed game that is ready to ship. Demonstrating the games core mechanics and features on a smaller scale. Due to time constraints and our overall skill level, I think this would be the best approach. Free assets are available for the Unity asset store, making development much faster.

**Motivation (100) words) - This should be a description of why the project will be interesting or useful. This may include statistics or other evidence, such as: "There service. are 1.5 billion cat owners in Australia, and so there is a huge market for an automated cat feeder. Using Raspberry Pi technology is a cheap and easily assembled solution to this problem."**

I love video games and it's always been a goal of mine to develop one from the ground up. It's amazing to see technology come together to create amazing works of art.
I can't think of a more exciting and entertaining way to develop skills as a programmer or artist than to develop a game. The skills you could learn from developing a game could also be interchangeable within the industry. Such as programming, time management, team work etc.

Troncoso (May 2021, para 10) mentions in a recent article posted on Dynamic Business, "Australia's gaming industry was one of the few industries that managed to find success during the pandemic, growing to $3.4 billion in 2020 – around a 6 per cent jump from the year prior."
Gaming is bigger than it's ever been and ultimately I think game development would be the most rewarding, fun and visually pleasing way to learn how to code.

**Description (500 words) - Detailed description of the features of the product or service**

The main feature of the game would be that it is a 2D platformer. The Player would move from point A to Point B to progress to the level. The player would control the characters movements through the level, avoiding hazards and obstacles with the goal of reaching safety before you melt! The levels would have puzzle-like elements that become harder as you progress to keep them interesting and challenging. The main element of danger would be from the sun's rays. Whenever the character is in direct sunlight, it will damage the player's health. Too much sun and the player will die. That's where shade comes in. Shade would play a big part in the game's mechanics as it would be the only place the player could stand without taking damage from the sun. Shaded areas would be limited to keep the level challenging.

Along with the dangers, there would also be elements in the game that would help the player achieve his goal. For example, collecting ice cubes would slow down the melting mechanic by replenishing the player's health and liquid chocolate would form a protective helmet that would protect the character from the sun's rays or other hazards.

The art style would be colourful and vibrant. The world is filled with bizarre and wonderful characters. Below is a rough sketch of the main character. Giving a good indication of the art style I am trying to achieve.

**<IMAGE>**

Concept art. Ice Scream.
Sketch by Adam Maiorana 2021

**Tools and Technologies (100) words) - Describe the software, hardware and/or other equipment needed. Include any relevant open source tools as appropriate.**

Unity Editor is the game development software. The engine will be used to create a 2D game. Unity is free when you create a personal or small business account as long as you are not generating over $100,000 annually.

A PC
The minimum system requirements are not very demanding, however the performance and rendering will rely on your hardware so the better it is the better the smoother the experience.

IDE for creating scripts. I recommend VS code which is free and has the following useful features:
Support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git

Recording DAW
A digital audio workstation to record sound effects and voice overs.
Lots of free options out there like garageband.

Microphones
A good condenser microphone for recording dynamic sounds.

Painting program
Krita is a free open source program that can be used to design artwork for the game.

**Skills Required (100 words) - List the skills required for your project, including software that needs to be written, and special hardware (if any). How feasible will it be to find the skills, software and hardware required?**

Because the project is focused on developing a demo, rather than a complete game, I believe with a lot of hard work it could be achieved. A few rough edges are to be expected and usually forgiven in an alpha build and those things can be refined later on.
I already own all the equipment and hardware required to start this project. The biggest hurdle would be time restraints and lack of game development experience. I've outlined below what would be required to get the project off the ground.

The first skill required would be the ability to use Unity Editor. The bulk of the workload would be done in unity so familiarity with the program is a must. Unity has become very popular in the last few years and more and more people are using it.

A basic understanding of C# would be helpful as Unity's scripts are written in C#. However, Unity's asset store has so many free assets available. I honestly think the game could be created with very minimal coding. Assets like player controllers scripts and art packs are readily available for free on the asset store

I have an art style in mind although, the technical ability and resources may be lacking to achieve a professional looking product. However, being an alpha build, I'm not too concerned with the overall look. I want to focus on the game mechanics and make the game feel as enjoyable as possible. Once all the game mechanics are polished and working well the art work would become the main focus. Placeholder art work could be used during development to speed up the process.

Music production software would also be required if the games music and sound effects were to be created. Otherwise there are free music and sound effects available online.

Writing would also be a desirable skill. A strong narrative would help draw the player in and make them want to explore the world.

**Outcome (100 words) - If the project is successful, what will be the outcome? How will the original problem be solved? What impact will this development have?**

If the project is successful it would lay the groundwork for what could potentially be a fully developed game. The outcome would be a fully functioning 2D platformer game demo with all the game mechanics and features working smoothly. Giving the player a good insight into the direction the game is heading. I hope that this would have a positive impact on my understanding of game development. It could also be very eye opening and expose me to the amount of work and effort required to develop a game in 2 dimensions. My ideal job is to create 3D applications in AR/VR and this project would be a step in the right direction. I also see the project as a very interactive and exciting way to learn.

References

Troncoso, G 2021, *Budget 2021 to finally boost Australia's video games industry,* Dynamic Business, viewed 15 June 2021, <https://dynamicbusiness.com.au/topics/news/budget-2021-australia-video-games-industry-tax-offset.html>