

## 9) Reflective Journal Entries

Each journal entry will be broken up for each week of the internship. I will be loosely following the DIEP formula.

### 9.1) Week 6

This was my first week of the internship.

I entered a call with Saleh and Amin to discuss my internship placement. I made up my mind that I would begin and enter the building on 31.03.2023.

I began my first day by dressing well and being cleanly shaven. First impressions count! I walked into the building and used the elevator to go to level 3. I then called Amin through the in-house telephone. He granted me access and then introduced me to Saleh. Amin then left Saleh and I alone. Saleh then told me to "pick a desk". I picked the one directly behind his. I was then greeted by my co-workers. These were Hassan and Mahdiah. They welcomed me to the office and let me get to work. I then cleaned my desk with Mahdiah assisting me and then set up my workstation (laptop, mouse etc). I then began working on the tasks I was assigned.

Later in the day, Saleh gave me a pear to eat. I met Nasrin, Alireza and Maryam.

While I worked I mostly listened to music and drank coffee. At lunchtime, I went to the campus hub to eat. After lunch, I continued working until I joined the team in a meeting. A guest lecturer came and presented ideas on how we can use generative AI to assist recommender systems.

Before I left I was required to set up my ID tag to gain access to the building. I went down to level 2 and spoke to the staff there and informed them of what I required. They said they would be in contact with Amin and that my ID should allow me to enter the level 3 building in 24h.

I asked Saleh what would this job entail. He said we will mostly be looking at how generative AI can be used to aid businesses in their processes.

I completed half the tasks assigned to me this week and informed Saleh I would finish the tasks on Monday the following week.

My first impression was that the floor was a normal office and Saleh and Amin seemed like nice polite individuals. The same could be said for the rest of my co-workers.

By working through the tasks assigned to me by Saleh I learned about the different aspects of generative AI. An example was code generation in different languages and the fact that generative AI chatbots such as ChatGPT use the deep learning AI model.

It was nice to feel so welcomed at this new workplace. It was a surprise to me as generally speaking, this has not happened at other places I have worked. I enjoyed working with AI. It was nice getting lunch on campus.

I liked that I was included in a meeting on my first day. Although I was still new this made me feel welcomed and showed me that the team wanted me to feel included.

Having my own desk was significant as it meant I had a space I could feel comfortable and productive.

I hypothesised that the centre would be clean, organized and productive. My reasoning for this was previous exposure to the centre (from an event at IBM - Sydney) and previous exposure to the school of computing at 9 Wallys Walk (previously known as E6A). My hypothesis was proven correct based on my experience during this first week.

Additionally, I hypothesized that I would enjoy working at the centre. This again was proven correct. For a long time, I have wanted to contribute to Science and humanity's understanding of our universe. By researching and contributing to the field of generative AI, I am able to do this! This was again confirmed by my experience during my first week at AAI@MQ.

Another comment I'd like to make about the work is that it is almost science fiction! Working with ChatGPT, Elevenlabs and DALL-E does not seem real. It is like I am working with a person living inside my screen. Science fiction is the phrase I have been using to describe to friends and family what it is like working with this technology. As a technology enthusiast, it is like I am dreaming. How can this be real?

As to what this all means? I believe that I will have a fun and enjoyable time at the centre during my internship.

This week I wanted to answer the questions "Will I enjoy my time and will this internship benefit me in my career?" I can honestly answer yes to both questions.

The office is not far from home. The office has a cafe. The staff are friendly. The work is enjoyable. I have a good relationship with my superiors. I am genuinely happy about going to work. Overall based on the experiences described above I am very happy at AAI@MQ.

Will this internship benefit my career? To answer that question we need to discuss what are my career aspirations. I plan to have a job that simply uses technology to aid businesses by improving efficiency. This is similar to what Saleh said we would be doing. I am able to do this with 2 supervisors aiding me (Saleh and Amin). The internship lets me do what I want to do in my career.

This week I learned quite a lot and I believe this will help me in my career. The most important thing I learned relating to this is what exactly is generative AI. As I mentioned in this document

before, my social media is flooded with information about AI. I hear all these fancy words but never looked up the proper definitions. This week I was able to do that and consult with academics about this. By filtering out the noise and defining and truly understanding this technology I believe that I can use this technology to help businesses in the future. Additionally, learning about office etiquette is beneficial as I have never really worked in an office like this one before. This is a soft skill that I believe will go a long way.

I believe that this week I was motivated and worked hard. I was able to set out a plan for the week and execute it. My coursework always taught me to question things, collaborate with others and to be honest, I believe I was able to do that this week and would like to continue doing this for the rest of the internship.

## 9.2) Week 7

This is my second week in the office. I began by using my ID to enter the building. I then worked on the tasks set to me by Saleh last week. I wanted to finish the tasks so that I could begin new tasks and properly use generative AI tools. I came into the office 3 days this week. Monday, Tuesday and Wednesday. I knew that Amin wanted me to come in 3 days a week. I planned to work at World Vision on Thursday this week.

On Monday I worked and finished the tasks set out by Saleh. We then reviewed the work I produced and I was assigned new tasks.

On Tuesday I brought my brother and Girlfriend to see what I was working on. The first thing we noticed was how polite and welcoming everyone was. Saleh also showed me that he had put a nametag on my desk, which I appreciated. After showing the guests around I escorted them out of the building. I then began working on the tasks Saleh had set out for me. By the end of Wednesday, I had finished the tasks. Additionally, I spoke with Saleh about future research work and the use of Trello to manage our work.

Saleh, having sensed I had finished the tasks he assigned to me, decided to give me more work. This stressed me out a little as I had a busy week ahead and only a few hours to complete the new tasks. Thankfully though I was able to conduct research and complete the tasks properly. These tasks were related to “recommender systems”.

I am glad that my ID worked. I want to come and go as I please and not need to bother anyone.

This week I was able to really make use of generative AI tools such as DALL-E, ChatGPT and Elevenlabs. I learned that ChatGPT is extremely powerful. I was able to generate HTML code to make a fan website for my favourite band Slipknot. Additionally, I was able to create the Flappybird game by asking ChatGPT to write code for a basic implementation of the game in the language named processing (similar to Java).

One of the tasks Saleh asked me to do was to research and learn about Google Colab. This is a Python-based online compiler environment. Essentially, I can write and execute Python code in this environment without downloading any IDEs or even installing Python locally. I believe that this is a powerful tool and hypothesized that I could use ChatGPT to write Python code to call upon its API to answer a question much like how anyone can use ChatGPT on the Open AI website. Thankfully, I was able to do this. The only manual procedure involved was to provide my own API key.

I wanted to do this as I understand the power that APIs provide developers. I wanted to use the power of ChatGPT in my own applications if I so choose. This may include having a discord bot!

These three accomplishments I would present next week to the centre.

As I mentioned above I was required to complete tasks related to recommender systems. I was stressed about this due to a lack of time. Thankfully however because I had learned about them during the previous week's meeting and because I was able to conduct research I was able to answer the questions.

I am beginning to feel stressed over this report and the midterm presentation. I need to inform Saleh that I have a lengthy report due soon and might need to do less research work in order to produce a high-quality report on time.

The first topic I'd like to evaluate is Saleh's response to me completing my tasks. As soon as he knew I was finished he gave me additional tasks to complete. This is good. What this means is that I will always have work to do. I do feel comfortable however to tell Saleh if I have too much work.

This week I was able to harness the power of generative AI, properly for the first time. This allowed me to generate meaningful material and has opened the door for future use. A moment I found significant was using the API call in Google Colab. It was like when I wrote my first hello world program. I felt powerful like I had the ability to call upon a digital aid. This allows me to use API calls in my own code. An example of this could be in spreadsheets, discord, or other programs I make or use. I come from a game design background so I often think about being able to ask an NPC a question with it using generative AI to produce a response. This could be multi-model too.

This week I was really able to get into the meat and potatoes of my work. I enjoyed my work and collaborated with Saleh. We discussed the work I had done and he gave me useful tips for improvement. Additionally, we discussed future work and how I may help him on using generative AI for pretty significant projects.

Overall, I had a pretty good week. This weekend is Easter and I look forward to spending time with family over this period. Additionally, I like that Saleh was able to set aside some time in his day to review my work. This shows me he cares.

I plan to use this technology going forward. The ability to call upon the ChatGPT API will aid Saleh and I in future projects. This week I gained more practical experience with generative AI tools. This is valuable as I can really see the potential these tools have. Aside from work, even in my everyday life, I have started to use generative AI for personal reasons. I am so excited to use these tools! I often find myself using the tools at home just for fun with family members. I plan over the easter break to show my extended family the power of ChatGPT. It will make for quite an interesting conversation at the dinner table.

### 9.3) Week 7.1

During this time period I had to inform Saleh that I had to spend most of my working time writing this report. I did continue to do independent research and use generative AI tools.

I attended one meeting in week 7.1. This gave me the opportunity to present to the centre some of my work with generative AI (API implementation into Python with Google Colab and a Flappy Bird game implementation in the processing language). The meeting was enjoyable. My colleague Mahdiah Labani presented some ideas around AutoGPT which I later researched in my own time. Additionally, Amin presented some ideas surrounding how we should be going about our research and how to stay up to date. Importantly he stressed the importance of mental health.

Unfortunately on Saturday 15.04.2023, my mother's cousin passed away. This turned my life upside down for a little and Amin decided to give me the week off. Thank you again Amin for doing this for me and my family.

### 9.4) Week 7.2

The only day I spent in the office this week (7.2) was Tuesday. Saleh mentioned that he was going to the gym during work hours. I mentioned that this would be good for his mental health and have positive effects on his work. He mentioned that Amin encourages him to be physically active as this aids his mental health and research capabilities.

The only other day I worked this week was Friday (from home) so I could be there for my family and be productive with this internship.

### 9.5) Week 8

This week was difficult. I worked on Wednesday, Thursday and Friday. The funeral was on Monday and Tuesday was a public holiday. For the most part, all I did this week was work on

this report and the presentation. In my own time (outside office hours) I continued to research different aspects of generative AI.

On Wednesday I returned to the office. I set up my computer and spoke to Saleh. He had given me feedback on previous work. The feedback was positive and he encouraged me to now work on this report and upcoming presentation. He even included some tips for the presentation. Unfortunately, I felt sick on this day and left the office early.

On Wednesday I sent Amin and Saleh an email outlining when I would be submitting documentation to the university. Additionally, I planned how I would present my findings to Amin. We concluded on Thursday via email that I would present to him in his office.

I really like the open communication channels here at the centre. It shows respect and makes me happy knowing that I am valued.

On Thursday I kept working on the midterm report and finished most of it.

Come Friday I reviewed, edited and kept working on the midterm report. Additionally, on Friday Amin hosted a brief meeting at 10 am then we celebrated Saleh's birthday with coffee and cake. This is nice as it shows Saleh that he is a valued team member and it let me meet new people and socialize.

Finally, on Saturday I finished polishing the report and submitted the document to the university.

## 9.6) Week 9

After completing the midterm report on Saturday I wanted to take a small break from work and continued working from home on Tuesday. On Tuesday I worked on the mid-term presentation.

More notably on Monday, I discovered a World of Warcraft addon named VoiceOver. This addon uses the Elevenlabs AI tool to generate voices for NPCs in-game. I decided I wanted to present this to the group on Friday (05.05.2023). I spoke with Saleh about this and showcased how the addon works in-game. He was impressed and agreed it was an impressive use of generative AI. I emailed Amin and got approval to present this instead of presenting anti-plagiarism tools. More details about this addon can be viewed in an article on the Wowhead website (Archimtiros, 2023).

Additionally, on Wednesday I finished working on my midterm presentation. Included in the presentation is an AI-generated video. This involved using ElevenLabs to create an AI voice followed by using D-ID to create a video to present to the audience. Note that the video presents only a fraction of the overall presentation however, I thought it was a cool thing to add.

Thursday came around. I presented my work (midterm presentation) to Amin, Taziva and Saleh. I believe it went well. Additionally, I received my marks for the midterm report and presentation and got 85% and 90% respectively. I am happy with these results. On this day I also presented a draft version of my VoiceOver addon presentation to Saleh and asked for feedback.

When Friday came around I was keen and excited to begin my presentation on the VoiceOver addon. The 10 am meeting occurred and we discussed various topics about AI. I gave my presentation however I had to do it very quickly as we did not have much time. I felt a little nervous talking about AI in front of a neurosurgeon (guest). Additionally, on Friday, Saleh introduced me to the Overleaf application. This tool allows me to streamline document production with its built in tools. This tool will be crucial to the production of my whitepaper.

## 9.7) Week 10

Week 10 came around and I planned to work on Monday, Tuesday and Friday. I continued to use the Overleaf application and worked on tasks Saleh planned for me. This included looking at the different templates that Overleaf has available as well as categorizing and explaining some of the different generative AI tools available online.

When Tuesday came around I continued working on my whitepaper. I learned quite a lot on Monday. I managed to use a tool that automates referencing for BibTex. This really helps as I would struggle to code the references myself. Overall I think the Overleaf tool is quite useful and will help me produce high-quality documents. Additionally, it will assist me in collaborating with Saleh and Amin.

On Tuesday I also discussed with Masoud various tools relating to plagiarism. I instigated this conversation as I wanted to discuss various tools that students use to get around plagiarism detection tools such as Turnitin and Grammarly plagiarism checker. On this day I felt quite sluggish but I was able to get a decent amount of work done.

On Friday I attended a team meeting with various members of the team discussing different aspects of their work and or interesting topics they stumbled upon throughout the week. I continued to work on my whitepaper and even expressed interest to Amin to run the discord server for AAI@MQ. In the afternoon I spoke to Saleh about my work on the whitepaper. He critiqued my work and I plan to review the work on Monday. Overall, today was a good day.

## 9.8) Week 11

Unfortunately, I woke up on Monday feeling quite ill. I decided it was best that I work from home on Monday and Tuesday and come into the office on Friday. On Monday I continued to work on the whitepaper, taking into consideration the criticism that Saleh gave me. I managed to mostly fix an issue we were having regarding image placement and added more detail throughout the document. I later sent Saleh a LinkedIn message updating him on my progress. Today I continued to research various aspects of generative AI. I have come to the conclusion that I would like to be an AI consultant once I finish this internship. I believe this internship is providing me with the skills and knowledge necessary to achieve this goal. I would like to have a meeting with Amin and Saleh regarding my future so we can plan what to do next.

On Tuesday I continued to work on the whitepaper by researching different generative AI tools. I included, ChatGPT, mentioned Google Bard, and Github's Copilot. I have organised a meeting between Saleh, Amin and I for next Friday morning. We will be discussing my future plans as an AI consultant.

On Friday I went into the office. I had a brief meeting with Amin regarding my career and asked for some advice. He mentioned to me that I should apply for BA roles if I want to be an AI consultant in the future. Additionally, we spoke about internal deadlines for submissions I need to make to the university (presentation and final report). After our brief meeting, we then joined the rest of the team for a meeting. During our time together we discussed various applications of generative AI and I was asked to present. I briefly spoke about Google's Bard as a competitor to ChatGPT and the new tool launched by Nvidia that uses AI to keep your eyes looking into a camera. When the meeting finished, I took a break to get some lunch then informed Saleh about what Amin and I discussed during our (private) meeting. Saleh recommended some sources for me to look at and gave his brief take on what I should do.

## 9.9) Week 12

This week I have a presentation due on Thursday. I went into the office on Tuesday and immediately began working on this task. I wrote a draft script and prepared a presentation with Google Slides. I practiced presenting and the timing was almost perfect. I have been allocated 5 minutes and when practising I went for 5:15. I believe that with practice I can get the time down while not rushing. Additionally, I learned about a tool named Jukebox by OpenAI. I spent a little bit of time researching this and plan to expand upon my findings in the whitepaper.

On Wednesday I continued to work on my presentation. After some light edits and rehearsal, I asked Saleh if I could practice my presentation with him. He agreed and we moved to the quiet room next door to Amin's office. I practiced and he gave me some really good feedback that I later used to change my presentation. As I write this I am now ready to present. For the rest of



## 9.11) Week 13

I came into the office on Tuesday and began to work on my final report. I plan to finish it on Friday. I need to add to the reflective journal entries for week 14 and change some of the wording to reflect that the document is now the final report and not the mid-term report. Additionally, I plan to make any changes suggested from Amin's review of the midterm report. This includes appropriate labelling of figures. I also added in work samples and polished parts of the document.

On Thursday I came into the office again and continued working on the final report. I ended up submitting the final report on this day. Tomorrow I plan to work on my whitepaper and attend a group meeting.

## 9.12) Week 14

Although I will be submitting this document in week 14 I wanted to include an entry for week 15. During this week I will continue to work on my whitepaper. I plan to add to its contents (if I have time) and tidy up the references. Additionally, I plan to attend a weekly meeting on Friday and thank the team for this internship experience.