Select Committee on Adopting Artificial Intelligence (AI) Submission 5

Dear Select Committee on Adopting Artificial Intelligence,

I write to you as a concerned 4th year Bachelor's student studying computer science at ANU. I am concerned that there is a systematic neglect of high consequence risks when there is some uncertainty. The potential risks posed by artificial intelligence (AI) if not carefully managed is among these. It has become clear to me that AI safety should be a top priority in our collective future. With the high stakes of AI advancement, such as cybersecurity and biosecurity, I believe we should seize this opportunity to ensure that AI safety is properly considered.

Firstly, I urge Australia to emulate countries like the US, UK, Canada, and Japan in establishing a National AI Safety Institute. Although the government has shown interest in regulating AI, the pace of AI development means we cannot afford to delay addressing safety concerns. An Australian AI Safety Institute could commence work towards safe AI without waiting for new legislation, and could provide an invaluable service by evaluating advanced AI systems, driving foundational AI safety research, and partnering both nationally and internationally on AI safety. Furthermore, the institute could prepare us for any future regulatory regime. It is clear that AI Safety Institutes are a crucial part of national AI governance regimes, and I believe it is the best way to keep up with change and protect our national interest.

Secondly, I would like to draw your attention to the potential risks posed by more advanced AI. Experts have warned that AI could enable terrorists to create bioweapons. For instance, a paper by Collaborations Pharmaceuticals demonstrated how an AI designed to find new drugs instead produced lethal molecules in a short timespan. Moreover, studies have shown that large language models could help create bioweapons. As such, it is imperative for the government to address biosecurity risks from AI. Australia, while already regulating the importation of synthetic DNA, could make minor adjustments to meet the screening standard promoted by the US. I believe that the Senate Inquiry should request evidence from relevant departments to understand when they became aware of biosecurity risks from AI and if any action is underway to address the risk.

Lastly, I am concerned about Australia's current approach to liability for AI companies as it has critical gaps that put the public at risk. A recent study found that 39% of Australians believe that making sure AI companies are liable for harms they cause should be the government's priority. Current negligence laws, written before technology became central in our lives, put the burden on a person harmed to prove that a developer or deployer of a system acted negligently. This is nearly impossible with AI systems' complexity and "black-box" nature. Without functioning liability systems, AI companies are incentivised to release risky products. Some AI safety experts advocate for a strict liability regime for AI harms, while others propose a fault-based liability system. As AI systems are already profoundly impacting our economy and society, I urge the Senate inquiry to make modernising Australia's AI liability laws an urgent priority.

In conclusion, AI advancements have the potential to be both beneficial and detrimental. This is why we need an AI safety institute, to identify common sense

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measures we can take, and to incentivise a safety culture in companies. MIT researcher Nancy Leveson has identified that in the field of engineering, creating a safety culture is the highest impact measure to avoid catastrophes, and we should heed this advice in the engineering of AI systems. I hope you take my concerns into consideration as you continue your inquiry into AI.

Regards, Alexey Trushin