Opinions of AI?

[00:02:26] **Yennie Sayle:** I'd just like to know as well what your opinions were on AI? Um, Stuart, I know you're doing engineering. So in comparison to like Lynn or Alex, for example, who study international studies, what are your opinions on AI?

[00:02:40] **Stuart:** [00:02:40] Um, I definitely think that AI is the way of sort of progressing into the future with most things. Especially in like, you know, manufacturing and that sort of thing AI is very important.

[00:02:50] I've studied alot about helicopters and, bushfire-fighting and that sort of stuff, and designing helicopters and aircraft, to be able to do other things, as well, AI is really important. Because we're more and more moving towards keeping the pilot out of helicopters and planes and things because you can be more efficient and it takes human error out of it.

[00:03:08]But I also think that generally in terms of weaponry, it's kind of a step too far, in my opinion, because it really de-personalises it.

Should it be a topic covered in studies like politics?

[00:03:19] **Yennie Sayle:** Yeah, absolutely. It is fascinating how a subject like this, which also could have like such grave detrimental effects to our security. Isn't really a major point of topic in degrees that do have a focus in its politics or maybe possible implementation like international studies or law, for example. What would your opinions be Lynn.

[00:03:39] **Lynn:** Yeah, even when we have discussed security and anything to do with weaponry, it hasn't been covered in detail, which yeah, I definitely think that that is necessary in terms of like politics and international security.

[00:03:57] **Yennie Sayle:** Yeah, absolutely. And what do you think would be like your major concerns when it comes to international security and having AI?

[00:04:08]**Lynn:** Right now there isn't any constructed guideline in terms of the inclusion of autonomous weapons. So I definitely think that that's necessary you know, there's already that threat with nuclear proliferation that this type of weaponry would definitely be a lot more easier for countries to implement as opposed to nuclear weaponry. So there definitely needs to be some immediate guideline.

On some of the concerns…

[00:04:36]**Yennie Sayle:** No, definitely. I mean, you know developing these killer robots can destabilize international security and obviously as well, society's humanity. And as you said before, it can raise a lot of legal, moral, ethical, and security concerns to say the least. So, I mean, we can also say that maybe in certain complex and unpredictable conflict situations, I mean it's rest assured that these weapons will lack the ethical and legal [00:05:00] judgments crucial to protect civilians, I can say.

How do you feel about research contributing to killer robots?

[00:05:04] Stuart, could you just tell us a bit more about, um, studying helicopters and autonomous helicopters; so how would you feel if you did research with your uni into obviously autonomous helicopters and then found out maybe parts of that research was used to advanced developments of lethal autonomous combat helicopters for the Australian defence?

[00:05:25]Stuart: Um, I would probably feel pretty bad about that, to be honest. Especially if I wasn't told anything about what the research is being used for and then I found out that it was being used to like go into warzones and shoot people and stuff -that would be pretty bad.

Is there a need for tech-ethics classes?

[00:05:40] Yennie Sayle: Yeah, obviously I can imagine. And I mean, when studying this topic, or like when going into this topic, I guess, being somewhat aware of the major risks, have you ever thought about whether maybe there needs to be a tech ethics class as part of a degree that offers AI, IT or robotics, or maybe whether an ethicist should be a part of a research project?

[00:06:03]Stuart: I would think that as part of a research project, it's probably a really good idea. Because obviously the people that develop the back end and stuff, really are only looking at numbers and codes and don't think about the rest ot it. Like when we are designing helicopters and looking at systems, that sort of thing, we really don't get taught very much about like what's actually happening with the helicopters. They're really just telling us about the systems. So , it would be very easy for you to develop an entire system and then just that could be completely detached to what it's actually being used for.

Possibility of your research contributing to killer robots…

[00:06:33]Yennie Sayle: Absolutely. within my degree, I've obviously never come across this topic specifically, but I would always think that, I mean, if you don't have a class or course educating you on why you should stop developing something that could potentially maybe be something dangerous, how can you trust that your research isn't being used for that same purpose by either programs or schemes or grants or whatever, with the Australian defence force.

[00:06:57] Stuart: Mmm also because, generally the university owns [00:07:00] all the work that you do while you're actually at the uni. So you don't really have any say in what your stuff does afterwards 'cause it's all based on what the university's decided.

[00:07:08]Yennie Sayle: Yeah. And how crazy is that though? Because wouldn't, you want to know, at least as a student or someone that is doing that research where your research is going and how it's going to potentially be used in the future.

[00:07:18] Stuart: Yeah, definitely.

On university research project funding;

[00:07:20] **Yennie Sayle:** Mmm. So obviously being university students, have you guys ever thought about who is funding these projects concerning AI robotics, et cetera, or you know, where your research or that research is going specifically in a general sense?

[00:07:38] **Stuart:** [00:07:38] I hadn't really given much thought into that at all, to be honest, where the money is actually coming from.

[00:07:42] **Lynn:** [00:07:42] No, I haven't either, but, um, now that this has been brought up, I definitely think it is an area of like weaponry that needs to be prioritized. Because in the chance that this is used for war, you are dealing with the risk of, um, of people's lives and like civilians. So [00:08:00] they definitely need to include some kind of ethics, um, guideline, outline some kind of official assessment of the ethics that would come into play when dealing with killer robots.

[00:08:15] **Yennie Sayle:** [00:08:15] Yeah, I mean, you're right. I never really took into consideration these factors at all. I only did while I was mapping up the links and connections between universities and defense research programs, while I was doing the webpage for the Campaign to Stop Killer Robots. So it was actually insane how many connections universities do have. And I know that there's one, for example, with Melbourne uni; I think it's with Lockheed Martin, the new STELaRlab, which is their Science Technology Engineers Leadership and Research laboratory. So the Defence Science Institute actually coordinated the collaboration with Lockheed and Melbourne uni and their research focus is specifically on robotics, AI, sensors, and communications and all that. So it's actually crazy to think about the [00:09:00] possibility of certain research being used for developing these weapons, but it's actually even more crazy to realize how little students know or are aware of this issue.

Concerns- arms race/proliferation/misuse/accountability;

[00:09:11] So, um, I guess with saying that, as we know, fully autonomous weapons are quite abhorent weapons and in comparison to nuclear weapons, these machines are not costly at all and would be easy to mass produce significantly. So I know a few of us do like philosophy and international studies and with engineering as well, what would your thoughts be on this? I guess in other words, with technology advancing at such a rapid pace, what are your opinions on these weapons being available, proliferated and maybe the potential for an arms race?

[00:09:41]**Stuart:** [00:09:41] Um, one of the things that we've always seen through history is that a lot of times stuff that is developed for military use becomes available to general public in one way or another. And kind of a scary thought is that potentially, these unmanned drones that can fly around and shoot people could just be available to like, I don't know, some [00:10:00] random guy in his shed could like make one and fly it around and, you know, shoot people. Um, and that's kinda the scary thing of all this technology becoming so

much more wide spread and available and cheap. Cause like no one can in their backyard, you know, make a nuclear bomb, but it's a different story.

[00:10:17]**Yennie Sayle:** [00:10:17] Yeah, well, a hundred percent even like the moral implications that come with that, right? So we have like these weapons that could potentially have obviously the power to kill people, so you know, they can take lives. Wars can happen so much more often because obviously there will no longer be any more human soldiers. You know, there would be the blur of accountability if something goes wrong. What if civilians get killed? Or if the machine glitches or get spoofed, like who is responsible for that, or who has that accountability? What if, you know, civilians could just be collateral damage because robots don't have obviously the fundamental principles of humanity or respect for human life to make a judgment call that could potentially save lives rather than take it. So, yeah, I do believe that youth engagement right now is super important for that, because it really is time for students to become more informed about the situation that is happening right now.

[00:11:10]**Alex:** Um, yeah, it's also, I guess, in terms of like a kind of new generation of weapons technology, the ability for it to be, um, hacked and, um, brought again onto the person who actually owning it and/or allegedly has control of it becomes a lot less certain or assured in comparison to other kinds of weapons like nuclear or, you know basic guns. So even if like the general population may not have direct access to it, um, there is a much larger risk of the safety of the people who do have it,   which provides an even further danger.

[00:11:47]**Yennie Sayle:** Well, yeah, a hundred percent. I mean, there's also the risk of going to war and in those wars if, you know, a computer or a robot is programmed by their algorithms to, you know, shoot someone or kill someone or target someone that, you know, has a gun or whatever, say a child picks up that gun, during war, will that child be collateral damage What happens to that? So that is also like a big issue with programming killer robots to do certain things like that.

Should young people/uni students care? University responsibility and transparency

[00:12:16] Now, going back to our discussion as a student, do you think that young people should really start taking this seriously and should uni students really start caring about a topic like this?

[00:12:28] **Stuart:** I would say that definitely uni students in relevant fields should be informed about it, that people on the cybersecurity side of things, or like, um, programming AIs or developing the mechanical side of things should definitely be made aware of what's going on. And, you know, the potential that what they're doing could go to these things. I think there's a chance that, you know, the average students, it might not affect them very much. It's quite difficult for them to do very much about it. But, um, I mean, obviously any awareness is still very good. [00:13:00]

[00:13:00] **Alex:** Um, I also think to assume that the onus of the awareness of this weaponry is on the student, I think is a little bit misguiding, because it should really more be about, uh, the transparency that the uni has towards, um, the students and the people that are sponsoring and funding the university. The transparency behind the funding, transparency behind their, um, research. So as everybody is more in the loop, rather than the question of whether students should be trying to seek it out, it shouldn't be a question of students having to go in and do their own work and seek everything out. It should be readily available information.

[00:13:38]**Yennie Sayle:** [00:13:38] Oh a hundred percent. I definitely agree with that as well. Like universities should establish clear policies and clear regulations that do state, you know, that they will not allow its research by staff or students to aid the development of killer robots. And it would be great to see universities publicly commit to that as well. But I also do believe that, you know, [00:14:00] some students aren't aware of this, so although it's great to have transparency with the university, I still do believe that there are actions students can take to help that, if that makes sense.

Student taking action;

[00:14:11] **Lynn:** [00:14:11] Yeah. And at university, you are in that space of education that, um, we definitely have the opportunity to access resources that can inform us on what's going on, in regards to fully autonmous weapons, but I do agree that there needs to be more transparency by universities because I wasn't aware before this, that, um, my university would be involved or even thought of it as a idea. So, um, yeah, there definitely, there needs to be more indications that that's, that's a, that's a, that's a thing. That's an area that the uni is involved in.

[00:14:48]**Yennie Sayle:** [00:14:48] Yeah, absolutely. I mean, the implications of such research, obviously to build lethal weapons will have grave effects to our future. And we will be the ones dealing with the detrimental effects of an unstable global state, obviously, if this plays out. And given the link between this topic and universities, I do believe students do have as well, a big role to play in educating ourselves and also being aware of this issue.

What can students do at uni to raise awareness?

[00:15:13] To wrap things up a bit. What do you think you can do? Or what do you think your universities should do? And as a uni student what do you think you should do to take action regarding this topic and how it can help to raise awareness and all that?

[00:15:28] **Lynn:** Definitely, yeah. Education. We should inquire about ethicists being included in that kind of research or in that field, that area, whether it be like computing, IT, AI, we should advocate to have more moral guidance put in regards to that study. And perhaps like, yeah, creating clubs at our university or talking about relevant issues occurring in the defense force relating to autonomous weapons.

[00:15:58] **Yennie Sayle:** [00:15:58] Absolutely. Or even just joining clubs. Like that would be great just for yourself as well, to be aware of what's going on in the issue, but also to, um,

create dialogue between, universities and students and staff and all of that. Just get it out there in the open.

[00:16:13] **Lynn:** We were talking about this, definitely international relations should have more focus on where the future of our weaponry is going, because it hasn't been something that has been discussed in detailed, but definitely is necessary as we're talking about global politics to include where our security is heading potentially.

[00:16:34] **Alex:** I think also I guess slightly more immediate group awareness; one of the best ways to do it through uni is through, um, like the student union that's in place. So approaching and trying to, um, open up some sort of dialogue for the student union to raise that awareness, to send out, I don't know, informative emails or, start up like a webinar or something like that, about these things, um, is a very good way to go about raising awareness [00:17:00] within the university itself .

[00:17:01] **Stuart:** Yeah, I would say also alot of the time the student unions will actually go into lectures and stuff inside the front and talk to the students. So it's quite a good way to like even target specific courses and specific subjects and things and go to them and open the dialogue with them and make them aware of sort of what's going on. Obviously it's not really possible right now, but you know when everything goes back.

[00:17:21] **Yennie Sayle:** Yeah. Yeah, totally. I mean, even if you want to put pen to paper as well, just like write to your program coordinator about whatever's lacking in your courses and make sure that, you know, it does become a prerequisite or an elective or something that you find important.

[00:17:39] So I'll just wrap it up here. Thank you guys for participating in this podcast and thank you all for listening.

[00:17:45] If you want to know more, look for us on Facebook, Twitter, and Instagram on Australia Campaign to Stop Killer Robots or use the hashtag ausbankillerrobots. Become part of the movement. So we stay in command.

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