



ADELAIDE
CONNECTED



Unlocking Australia's Future: Exploring the Power of AI

Welcome

- Welcome to Country
- House Keeping
- DutchSA and Adelaide Connected
- Torrens University
- Keynotes

DutchSA – Adelaide Connected 7.1 – 2 May 2024



Thanks for your support!



Ouwens Casserly
Real Estate



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<https://byrnevineyards.com.au>



- *Byrne Blanc de Blanc (sparkling white)*
- *Byrne Reserve Clare Riesling 2023*
- *Flavabom Field White 2022*
- *Byrne Reserve Clare Valley Shiraz 2019*
- *Calcannia Clare Valley Sangiovese 2023*
- *Calcannia Clare Valley GSM 2021*

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Beers from Deep Liquid

<https://www.deepliquid.ai>



Scan the QR Code to review the AI Pale Ale

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Unlocking Australia's Future: Exploring the Power of AI



Prof. Anton van den Hengel

*Director, Centre for Augmented Reasoning
– Australian Institute for Machine Learning*

DutchSA – Adelaide Connected 7.1 – 2 May 2024



Unlocking Australia's Future: Exploring the Power of AI



A. Prof. Johan Verjans MD PhD FESC FRACP

*Consultant Cardiologist Royal Adelaide Hospital / Jones Radiology
Deputy Director, Medical Machine Learning, Australian Institute for
Machine Learning, University of Adelaide, Platform Leader AI, South
Australian Health and Medical Research Institute*

DutchSA – Adelaide Connected 7.1 – 2 May 2024





**AUSTRALIAN INSTITUTE FOR
MACHINE LEARNING**

Engaging with Industry: Experience in AI in Health

Selling an AI ecosystem

Assoc Prof Johan Verjans MD PhD FESC FRACP





- One of six research institutes at the University of Adelaide
- Largest Machine Learning Group in Australia – 200+ people

**Deputy Director (Health)
Australian Institute for
Machine Learning**

*AUs Largest ML group (200+ people)
#7 AI (TIMES higher education)*





★ Top publications

Top cited publications over the last five years [Learn more](#)

Publication	h5-index	h5-median
1. Nature	414	607
2. The New England Journal of Medicine	410	704
3. Science	391	564
4. IEEE/CVF Conference on Computer Vision and Pattern Recognition	356	583
5. The Lancet	345	600
6. Advanced Materials	294	406
7. Cell	288	459
8. Nature Communications	287	389



28 papers in 2021

23 papers in 2022



Projects ongoing

- Imaging
 - Cardiovascular Imaging
 - GI / Colonoscopy
 - Colorectal cancer
 - Chest CT / Xray
 - Orthopaedics
 - Ophthalmology
 - Critical Care
 - Breast Cancer
- Proteomics, Lipidomics, Metabolomics
- Lipidomics to predict cardiovascular disease and treatment response
 - Breath Analysis
- Genomics / Statewide Genomics Centre
- Clinical Trials / Drug Development / Testing
 - Treatment response Leukemia
 - Immunotherapy response





**Formal collaborations
after
government support
of AIML
>6M in grants
30+ projects**



Women's and Children's Hospital
ADELAIDE



2019

2020

2022



AIML ENGINEERS

Excellence in
Science and Industry
Collaboration award
South Australian Government



Member of Global Alliance of Centres AI in Medicine -
Monthly meetings (ACAIM)



Founding Centers



THE SHARON DISNEY LUND
Medical Intelligence &
Innovation Institute



*Nominated AI Centre in Medicine of the Year
(AIMED 2022)*

One-stop-shop for companies

Leading Methods AI

Multinationals

Computer Scientists

Data Scientists etc



Leading Applied AI Ecosystem

Computer Scientists

Data Scientists, Molecular Scientists,
Clinicians

Best Datasets

South Australia Health Network is unique due to its size,
connected single health system
stable population

-> Best longitudinal clinical dataset in Australia

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The logo for the Australian Institute for Machine Learning, featuring a purple background with a stylized image of a person's face and the text "AUSTRALIAN INSTITUTE FOR MACHINE LEARNING".

AUSTRALIAN INSTITUTE FOR
MACHINE LEARNING

WYCHIME LEARNING



Pharma AI Readiness Index

Ranking is based on a scoring model using CB Insights datasets.

Rank	Bank	Score ▼	Talent	Execution	Innovation
1	Roche	77.48	★★★★☆	★★★★☆	★★★★★
2	NOVARTIS	70.16	★★★★☆	★★★☆☆	★★★★★
3	Johnson & Johnson	67.43	★★★★☆	★★★★☆	★★★★☆
4	NOVARTIS	61.37	★★★★☆	★★★★☆	★★★☆☆
5	sanofi	59.14	★★★★☆	★★★★☆	★★★★☆
6	AstraZeneca	58.12	★★★★☆	★★★★☆	★★★☆☆
7	AMGEN	57.66	★★★★☆	★★★★☆	★★★☆☆
8	Pfizer	52.10	★★★★☆	★★★☆☆	★★★☆☆
9	GSK	51.79	★★★★☆	★★★☆☆	★★★☆☆
10	Bristol Myers Squibb	49.74	★★★★☆	★★★☆☆	★★★☆☆
11	moderna	49.66	★★★★★	★★★★☆	★★★☆☆
12	BIONTECH	49.53	★★★★☆	★★★☆☆	★★★★☆
13	MERCK	49.13	★★★★☆	★★★☆☆	★★★☆☆

One-stop-shop for companies *Multinationals*



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**AUSTRALIAN INSTITUTE
FOR MACHINE LEARNING**

SIEMENS
Healthineers



Australian Government

**National Health and
Medical Research Council**



**AUSTRALIAN INSTITUTE
FOR MACHINE LEARNING**

SIEMENS
Healthineers

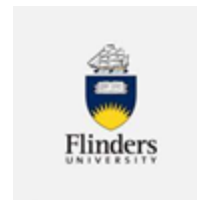


Australian Government
National Health and
Medical Research Council



AUSTRALIAN INSTITUTE
FOR MACHINE LEARNING

SIEMENS
Healthineers



RapidX AI Cluster-randomised Clinical Trial

Recruited 17,000
patients
12 hospitals

Evaluation of an AI-based decision support tool for more effective, consistent and timely decision-making by doctors and health professionals for patients with Chest pain

The HeartAI system is a modern data and analytics platform to support best practice architectures and implementations for systems that are extensible, scalable, reactive, performant, secure, resilient, and tolerant to failure.

The system is primarily a [cloud-native reactive microservices](#) architecture that is orchestrated with the [Red Hat OpenShift](#) platform and the [actor-based concurrency](#) system [Akka](#).

The system deploys to [Microsoft Azure](#) and implements modern and best-practice cloud technologies. Current service capabilities include data services, linkage services, aggregation and reporting services, analytical services, and user-interfacing services.

One-stop-shop for companies *Multinationals*



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Ethics / Guidelines

VIEWPOINT | VOLUME 4, ISSUE 5, E384-E397, MAY 2022

The medical algorithmic audit

Xiaoxuan Liu, PhD • Ben Glocker, PhD • Melissa M McCradden, PhD • Marzyeh Ghassemi, PhD • Prof Alastair K Denniston, PhD [†] • Lauren Oakden-Rayner, MBBS [†]   • [Show footnotes](#)

[Open Access](#) • Published: April 05, 2022 • DOI: [https://doi.org/10.1016/S2589-7500\(22\)00003-6](https://doi.org/10.1016/S2589-7500(22)00003-6)

CONSENSUS STATEMENT

<https://doi.org/10.1038/s41591-020-1034-x>

nature
medicine

 Check for updates

OPEN

Reporting guidelines for clinical trial reports for interventions involving artificial intelligence: the CONSORT-AI extension

Ethics / Guidelines



THE LANCET
Digital Health

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One-stop-shop for companies *Multinationals*



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Computer Scientists
Data Scientists etc

Medtronic

Leading Applied AI Ecosystem
Computer Scientists
Data Scientists, Molecular Scientists,
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Medtronic

BROAD AND DIVERSE MEDICAL TECHNOLOGY
DIVERSIFICATION ACROSS BUSINESS UNITS & GEOGRAPHIES

BUSINESS UNIT DIVERSIFICATION

Innovation to Address
Multiple Disease States & Conditions



GEOGRAPHIC DIVERSIFICATION



One-stop-shop for companies

SMEs



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Computer Scientists
Data Scientists etc

Leading Applied AI Ecosystem

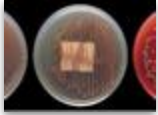
Computer Scientists
Data Scientists, Molecular Scientists,
Clinicians

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One-stop-shop for companies **SMEs**

APAS Petri Dish Reader
*First in class FDA approved
device*



**Clinical 3D
Bladder Scanner**
AI enabled



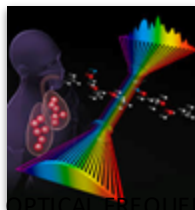
**LBT
Innovations**

One-stop-shop for companies *SMEs*

AI enabled
Clinician Insights
*using real-time medicare
and hospital data*

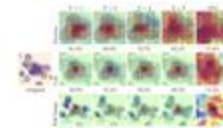


AI Breath Analysis
Clinical trial



OPTICAL FREQUENCY COMB

AI Leukemia detection
*Clinical Cell
Classification*



Interpretable Deep Learning for Chronic
Myelomonocytic Leukemia Analysis

AI Health - Industry engagement

Key elements

1. Deep Domain Expertise

Deep AI knowledge and understanding, ability to understand the industry's challenges

2. Credibility

Global top ranking in publications, award winning engineering team, experience working with large and small companies

3. Understanding Pain Points

Immersing yourself in the industry to gain insights (their lack of deep ML expertise, lack of data, lack of talent)

Identifying key bottlenecks, inefficiencies, unmet needs, focusing solutions on high-impact areas

4. Access to data and talent

AI Health - Industry engagement

Key elements

1. Deep Domain Expertise

Deep AI knowledge and understanding, ability to understand the industry's challenges

2. Credibility

Global top ranking in publications, award winning engineering team, experience working with large and small companies

3. Understanding Pain Points

Immersing yourself in the industry to gain insights, complement lack of deep ML expertise.

4. Access to data, deployment infrastructure, and talent

Provide pathways to data, infrastructure and talent.

5. Starting Small

Low-risk, short-term pilot projects to build trust and show measurable value. Learn about working together

6. Delivering Impact for Industry

- Providing quantifiable improvements (e.g. cost, time, performance metrics)

7. Bridging Domains

- Blending data with technical depth, data, govt/academia, with business



Thank you

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www.adelaide.edu.au/aiml

Unlocking Australia's Future: Exploring the Power of AI



Prof. Michelle Picard

*Pro Vice-Chancellor Learning & Teaching Innovation
– Flinders University*

DutchSA – Adelaide Connected 7.1 – 2 May 2024





Professor Michelle Picard



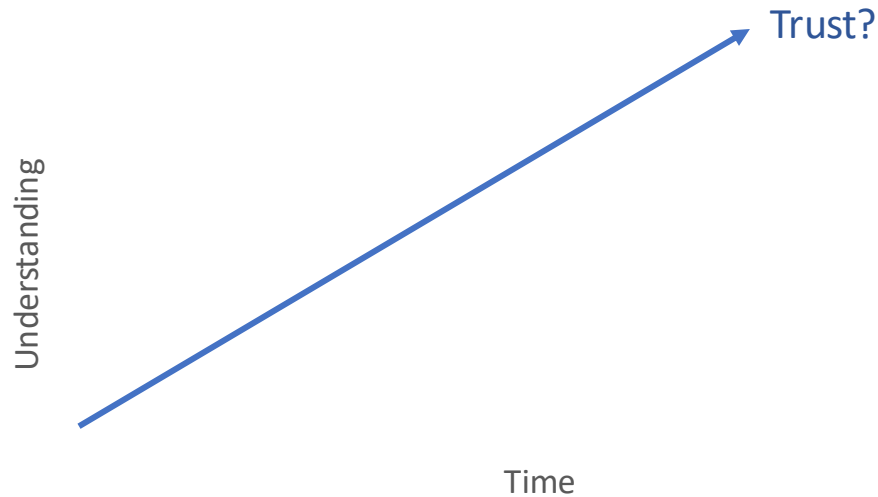
**Flinders
University**

Generative Artificial Intelligence:
Universities and Business
Collaborating and Challenging



Flinders University acknowledges the Traditional Owners and Custodians of the lands on which its campuses are located, these are the Traditional Lands of the Arrernte, Dagoman, First Nations of the South East, First Peoples of the River Murray & Mallee region, Jawoyn, Kurna, Larrakia, Ngadjuri, Ngarrindjeri, Ramindjeri, Warumungu, Wardaman and Yolngu people. We honour their Elders past, present and emerging.

Trust & Understanding



Trust & Understanding is a thing that comes with time.

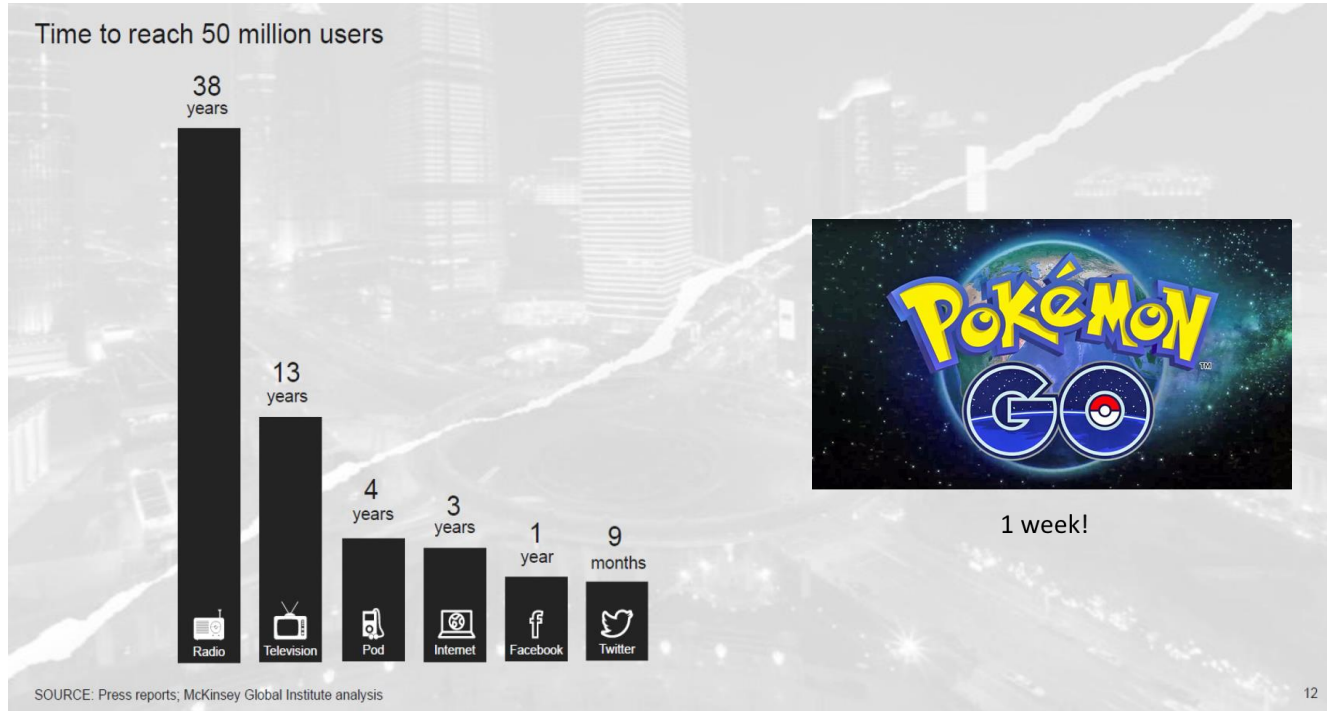
The more time you spend learning about something the more you tend to understand.

And after understanding, you make the decision to trust or not.

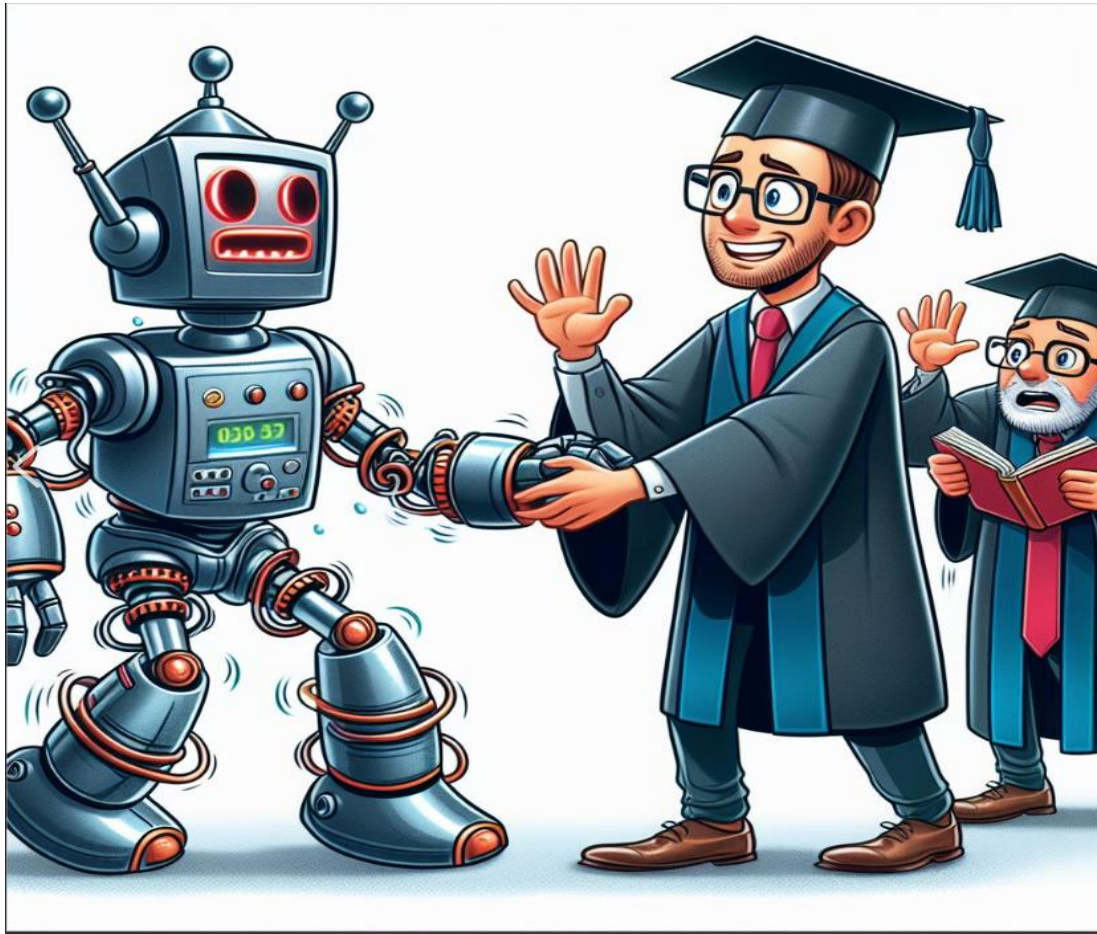
Challenges in times of rapid change

Rate

- Rate of adoption of new technology



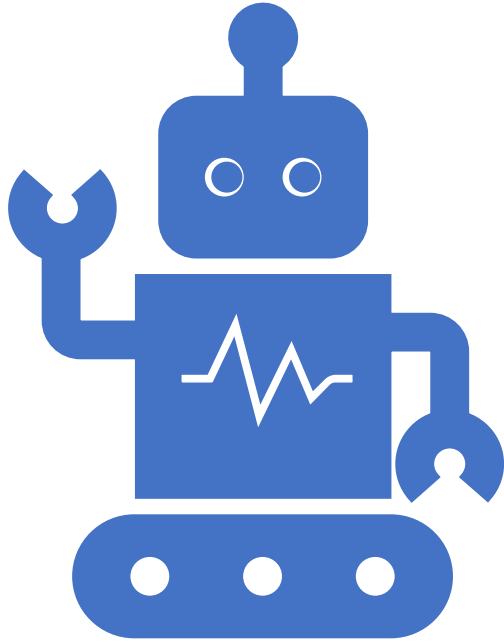




Rate of progress in (Higher) Education Pedagogy? Responding to rapid change within an unagile system

- 'Exploring the Generative Mechanisms and Factors Shaping Academics' Trust in Academic Development Units'
- Expectation for clarity and simpler answers around artificial intelligence
- (Boitshwareloa, Nallayaa, Picard, Abu Hassan, Nghiem Nguyen, 2024)

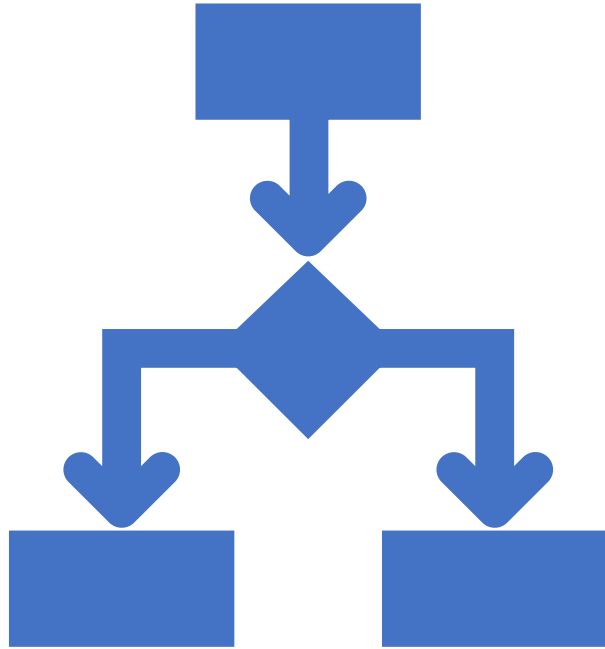




Importance of AI Explainability

- AI is increasingly integrated into various facets of our operations, from student admissions to academic research.
- Lack of understanding about AI decision-making processes can lead to scepticism, mistrust, and even unintended consequences.
- Achieving explainability ensures accountability, promotes trust, and allows for effective oversight.

Transparency as a Cornerstone



- Transparency involves making AI systems' processes, algorithms, and data accessible and understandable to relevant stakeholders.
- Transparent AI fosters collaboration, empowers users, and facilitates continuous improvement.
- Transparency also enhances compliance with ethical guidelines and regulations.

Equity Dilemma

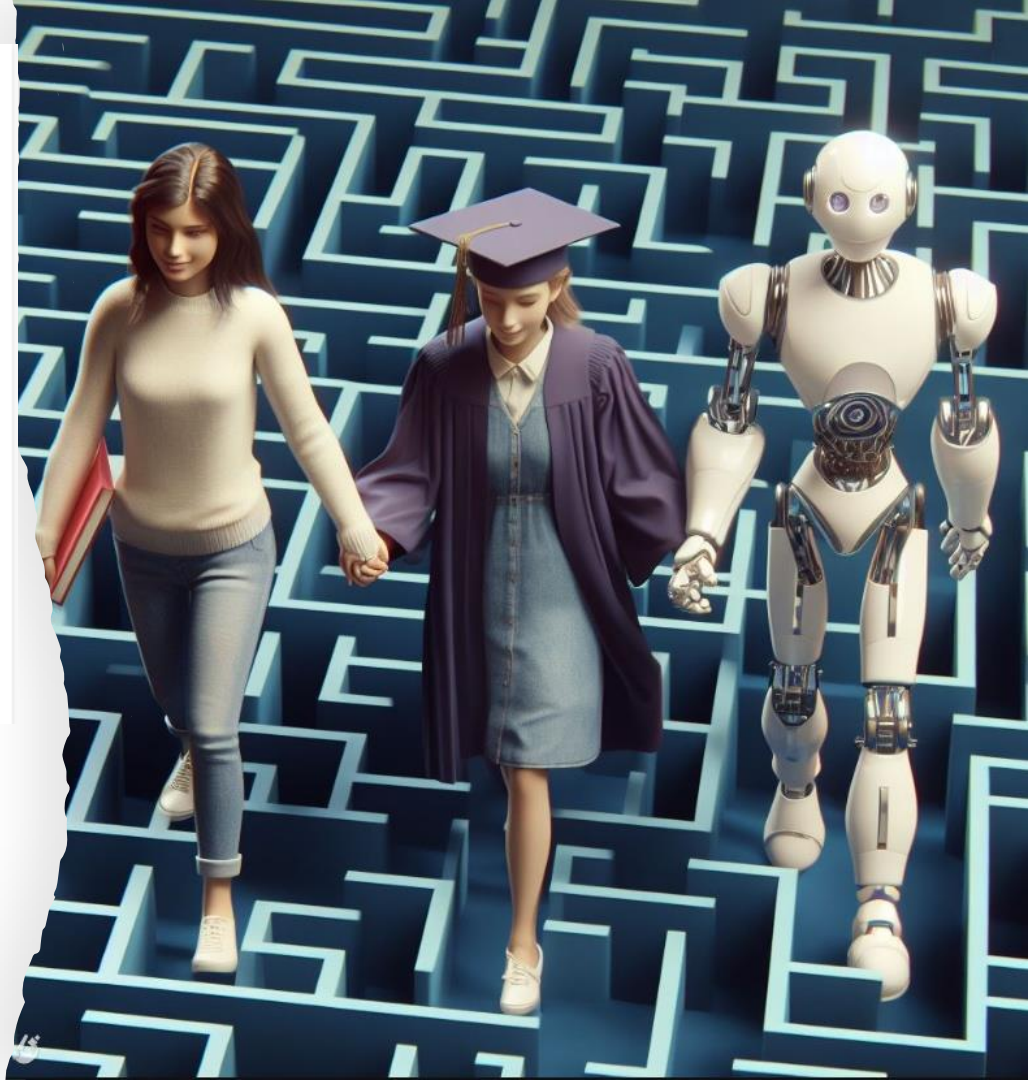
	Student A Uses AI	Student A Does Not Uses AI
Student B Uses AI	Equal academic playing field	Disadvantage to Student A
Student B Does Not Use AI	Disadvantage to Student B	Equal academic playing field

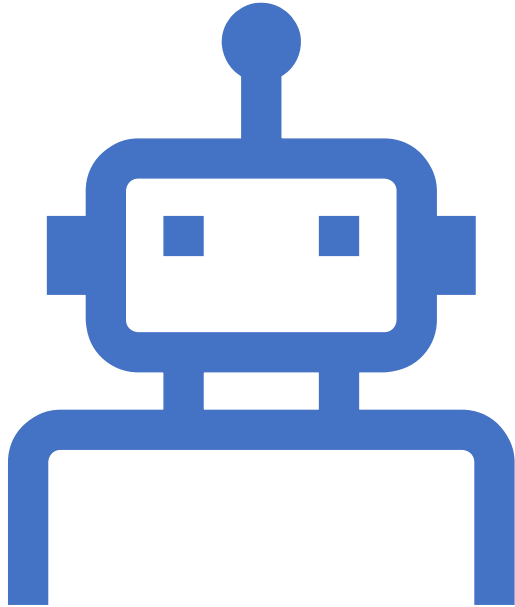
Position Statement of the use of Artificial Intelligence at Flinders University

At Flinders University, we recognise the potential benefits of artificial intelligence (AI) in improving teaching, learning, research, and administration. We believe that the responsible use of AI can help us achieve our mission of changing lives and changing the world.

We also recognise the challenges of this rapidly evolving technology and are committed to using AI in an ethical and transparent manner, consistent with our values of integrity, courage, and excellence. We recognise the ethical implications of AI, including issues such as bias, privacy, and security, and we are committed to addressing these issues through rigorous ethical standards and practices.

Setting up partnerships to navigate uncertainty:
'Flinders Digital Literacy and Artificial Intelligence Working Party'



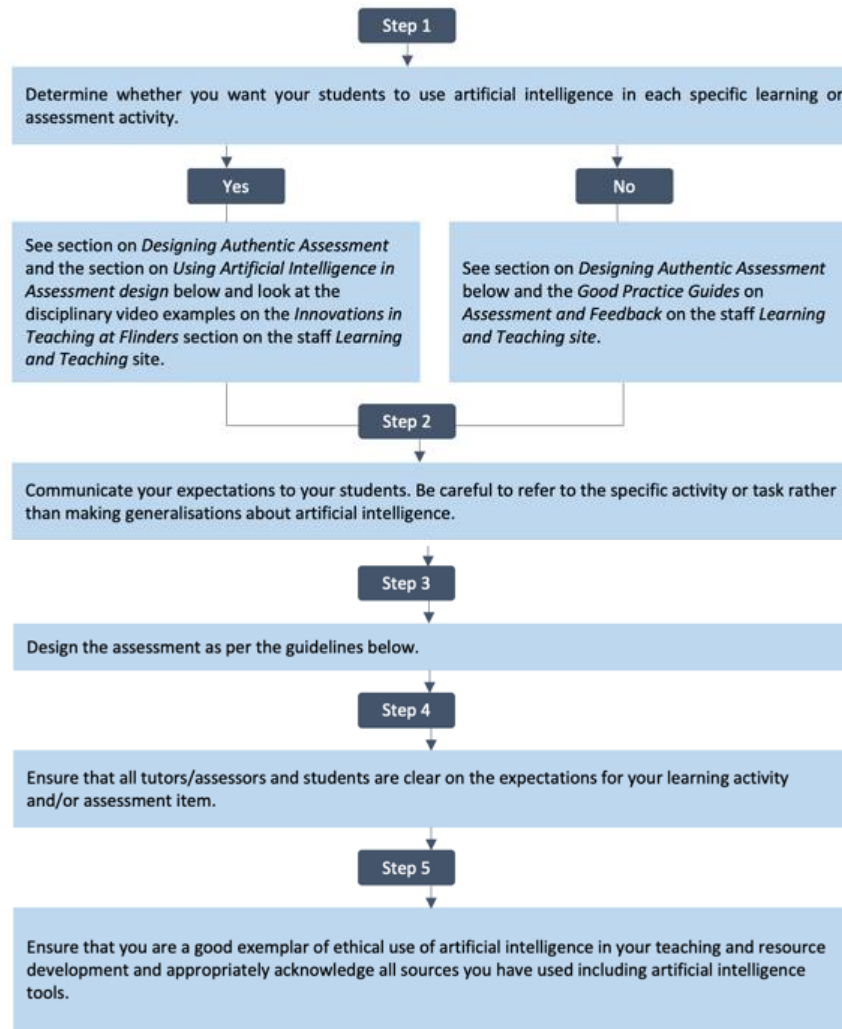


Prof Romy Lawson

Strategies for Achieving AI Explainability

- Develop clear documentation explaining AI systems' objectives, methodologies, and limitations.
- Provide accessible training and educational resources for staff and students on AI fundamentals.
- Implement tools for visualizing AI decision-making processes and model outputs.
- Foster interdisciplinary collaborations to ensure diverse perspectives in AI development and validation

Practice – Decision Making



Practice – Clear Communication & Guidance



Appraising AI tools

When using any new digital tool or source of information, it is good practice to think critically about why you are using it, how it can help you, and what its limitations are.



Purpose of the tool



Accuracy and trustworthiness



Relevancy

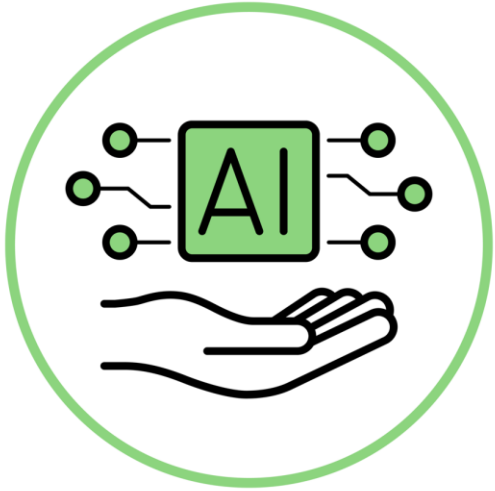
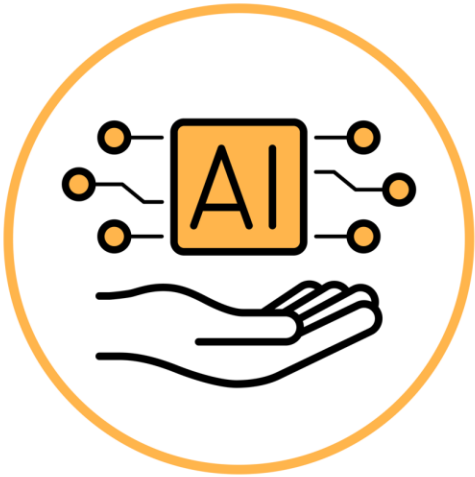
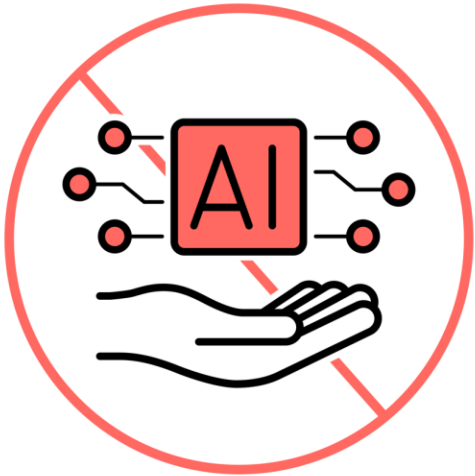


Legal considerations



Social and ethical considerations

Practice – Clear Communication & Guidance



Practice – Clear Communication & Guidance

PODCAST EPISODE

GENERATIVE AI (CHATGPT)

OpenAI. (2023). ChatGPT (Mar 23 version) [Large language model].
<https://chat.openai.com/chat>

Note: the author is the author/creator of the model; the date is the year of the version used; the title is the name of the model. ChatGPT uses a date for version labelling, other models may use a different system. For more, see: <https://apastyle.apa.org/blog/how-to-cite-chatgpt>



Referencing is a standard convention used by academic and professional communities to inform readers of the sources of information used in a piece of written work. There are many referencing formats (e.g. Harvard, APA, MLA, Vancouver) and it is critical that you use the one prescribed by the people you are writing for. Check what style your College / topic requires. **This quick guide covers how to reference common source types using the American Psychological Association (APA) system (7th edition).**



Please note, this is not an exhaustive list. More complete examples of APA 7th referencing can be found here:
<https://apastyle.apa.org/style-grammar-guidelines/references/examples>
or see the *Publication Manual of the American Psychological Association* (7th edn, 2019).

OVERVIEW

You must cite all your references in order to:

- **acknowledge** your sources
- allow the reader to **verify** the data / information
- allow the reader to **consult** your sources independently for their own purposes
- **show** the reader the depth and breadth of your reading.

References must be provided wherever you **quote** (use exact words), **paraphrase** (use other people's ideas using your own words), **summarise** (use main points of someone else's opinions, theories or data) or **use** other people's data or figures. Your references may be sources of information such as books, periodicals, websites, newspapers, government reports, legal cases, electronic recordings (CD, DVD, television) or brochures. Note that some of these sources are considered more credible than others. The main elements which need to be recorded in the APA system are the *author*, *date*, *title* and *where the source is found*.

The APA referencing system consists of two components, **both** of which are required:

1. THE IN-TEXT CITATION

This is the short in-text reference to the source of the information e.g. Maguire (2018) or (Maguire, 2018).

2. THE REFERENCE LIST

This is a list at the end of the written text of all references cited within. In this case it contains all the details of the reference rather than the short version used in the in-text citation. One item might look like this: Maguire, E. (2018). *Girls, autobiography, media: Gender and self-mediation in digital economies*. Springer.

THE USE OF GENERATIVE ARTIFICIAL INTELLIGENCE (eg. CHATGPT)

There are a number of generative artificial intelligence technologies that can be used to generate sophisticated language and visual content, such as Open AI's ChatGPT and DALL-E. These tools may become part of your assessment, so it is important to learn how to use them ethically and responsibly in order to avoid instances of academic misconduct.

- Ensure you check with your Topic Coordinator to confirm that the use of Generative AI technology is permitted in your assessment and to what extent.
- Ensure you cite content developed by these tools (an example of the use of ChatGPT as a source has been included in the In-text Citations section of this guide).
- Provide a declaration acknowledging which AI technologies have been used and how. This should be included either as a footnote or at the end of your reference list, as per your topic coordinator's preference. For example:

I acknowledge the use of ChatGPT in brainstorming of this assignment using the following prompt: How can students use AI tools ethically? The output was evaluated and integrated with findings from the literature.

Trust Issues

Privacy: Generative AI models trained on large datasets may inadvertently memorize sensitive or personal information present in the data. This raises privacy concerns, as generated content could potentially reveal private details about individuals without their consent.



Walled Garden – for example Co-pilot where your data remains within the security of your organisation but data can be used from outside of the organisation

Recommendations for Higher Education

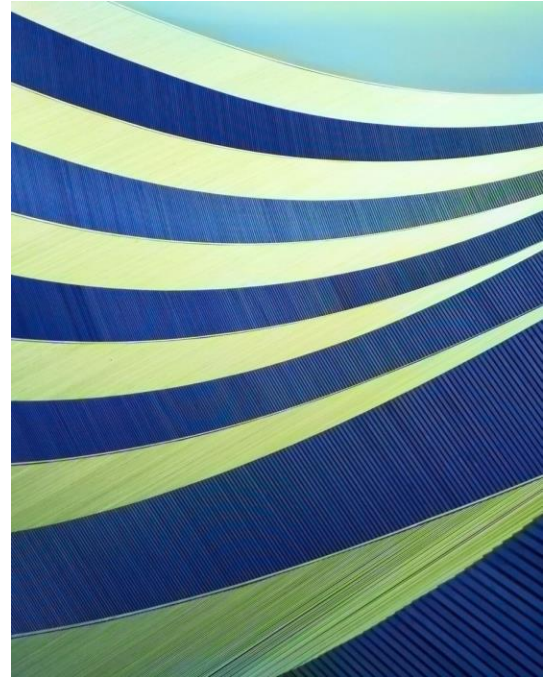
1. Establish mechanisms to share practices and approaches nationally around the use of generative AI in education

2. Work with external partners (e.g. industry, government, community) to determine how generative AI does and will impact on the work of graduates.

3. Identify, support, and promote appropriate use of generative AI to relieve workload burdens for staff

4. Continue to monitor and update institution-wide guidelines and policies around generative AI use to provide clarity for staff and students and keep up-to-date with regulatory and technological developments

(Liu, Fawns, Cowling and Bridgeman, July, 2023)



Building Trust

Continuous Monitoring and Evaluation: Establish processes for monitoring and evaluating AI systems' performance, reliability, and impact over time. Regularly assess AI models' accuracy, fairness, and effectiveness in real-world settings and iterate on improvements as needed.

Education and Training: Provide training and educational resources on AI fundamentals, ethics, and best practices for stakeholders, including developers, users, and decision-makers. Foster a culture of responsible AI use through ongoing learning and knowledge-sharing initiatives.

Prof Romy Lawson

AGILE



VS

WATERFALL



AI Assessment Scale

AI

Academics assess students' learning by...

Students demonstrate their learning by...

No AI

Creating assessments which 1) evaluate students' learning in real-world interactions not requiring use of generative AI in class, simulations, or the workplace 2) assess core skills and competencies which would not usually require technology orally or in writing **under supervised conditions**.

Working either collaboratively or independently and relying on their knowledge, understanding and skills under real-world conditions. Completing assessment without AI assistance. **AI must not be used at any point during the assessment.**

AI Advised

Creating assessments that emphasise **student reflection and development of independent** writing, design, or oral presentation skills in line with authentic disciplinary expectations. Students can respond to prompts/suggestions provided by generative AI built into the software to complete the task.

Students are permitted to use in-built generative AI such as slide design or grammatical/editing but are required to generate their own responses in line with the conditions and expectations of the task. **No AI content is allowed in final assessment.** Drafting processes will be monitored.

AI-Assisted Idea Generation & Structuring

Creating assessments that emphasise **student reflection and development of independent** writing, design, or oral presentation skills in line with authentic disciplinary expectations. Students are permitted to use AI to assist in generating ideas and structuring texts.

Students are permitted to use AI to brainstorm ideas or provide ideas on structuring of documents. **They cannot create content using AI.** Students should provide AI prompts used and drafts of their work and **acknowledge** how they used AI in their final submission.

AI-Assisted Editing

Creating assessments that emphasise **student reflection and development of independent** writing, design, or oral presentation skills in line with authentic disciplinary expectations. Students are permitted to use AI to make improvements to the clarity or quality of the work.

Students are permitted to use AI to edit their work and make improvements to the clarity and quality of their work. **AI can be used, but original work with no AI content and AI prompts and responses must be provided in appendix.** Student acknowledge how they used AI in their final submission.

AI Task Completion, Human Evaluation

Creating authentic assessments where students could normally use AI for some or part of the task in real-world interactions. Students are required to **critically engage with AI generated content** and evaluating its output if used. AI tools permitted should be specified and provided to students.

Students are **permitted to use AI for some or most elements** of the task and demonstrate effective use of AI. They are expected to **evaluate output** irrespective of how it is attained, keep all prompts and output, and acknowledge and **cite AI created content** in their final submission.

Full AI

Creating authentic assessments where students would normally use AI in the real-world as a 'co-pilot' to meet the requirements of the task. The task requires a **collaborative approach with AI and enhancing creativity**. AI tools should be specified and provided to students.

Students are **expected to use AI creatively and collaboratively** to complete the task and demonstrate effective use of AI. They are expected to **evaluate output**, keep all prompts and output, and acknowledge and **cite AI created content** in their final submission.

Adapted from the AI Assessment Scale Perkins, M., Furze, L., Roe, J., & MacVaugh, J. (2023). Navigating the generative AI era: introducing the AI assessment scale for ethical GenAI assessment. arXiv preprint arXiv:2312.07086. <https://leonfurze.com/2023/12/18/the-ai-assessment-scale-version-2/>

<p>Aarti – Psychology</p> <p>Aarti, a college student, is preparing for a challenging online exam. She knows that the exam questions are randomised from a large pool of questions, so she devises a plan. She asks her tech-savvy friend, Malini, to use AI-powered software to analyse open-access past exams and generate possible questions that might appear in the upcoming test. Aarti then uses these to practice and prepare for the online exam.</p> <p>Has Aarti acted with academic integrity in getting help from a third party?</p>	<p>Jefferson – Education</p> <p>Jefferson is an <u>Education</u> student who is working on a group project that includes a lesson plan. He is working late and is tired, so he asks an <u>Artificial Intelligence</u> tool for a lesson plan that teaches a specific skill for students with different learning needs.</p> <p>Has Jefferson acted with academic integrity by getting help from the AI tool with his part of the group assignment?</p>
<p>Mackenzie – Law</p> <p>Mackenzie is working on a group project with other classmates. One of their classmates is unwell and submits their part of the assignment late. Mackenzie is collating all the information, but when they read through their colleague's section, they realise that it appears familiar and on checking with <u>lexmatching</u> software, they realise that the work is very similar to an online text. Mackenzie submits the work as is as they do not have time to address the issue.</p> <p>Has Mackenzie acted with academic integrity by submitting work for the group assignment which includes work that might be plagiarised.</p>	<p>Allen – Information Technology</p> <p>Allen is working on an assignment. His friend generates an AI summary of the reading material for him. He rephrases the output slightly and includes it in his assignment. He cites the book, but not the AI tool or his friend.</p> <p>Has Allen acted with academic integrity by submitting this work without citing or acknowledging AI or his friend?</p>
<p>Dylan – Government</p> <p>Dylan is working on an assignment. They are asked to analyse a policy and then make a reasoned argument of how government should implement this policy. Dylan develops their <u>argument</u> but is struggling to identify suitable references. They ask an artificial intelligence tool to generate references for them and add them to the essay.</p> <p>Has Dylan acted with academic integrity by generating references through artificial intelligence?</p>	<p>Noor – Business</p> <p>Noor is thinking about how to plan for her project. She has many components to the task and feels overwhelmed. She thinks that she can post the assignment question in an Artificial Intelligence chatbot.</p> <p>Has Noor acted with academic integrity by posting her complex essay question in an AI <u>chatbox</u>?</p>

Education and Training:

- Provide training and educational resources on AI fundamentals, ethics, and best practices for stakeholders, including developers, users, and decision-makers. Foster a culture of responsible AI use through ongoing learning and knowledge-sharing initiatives.

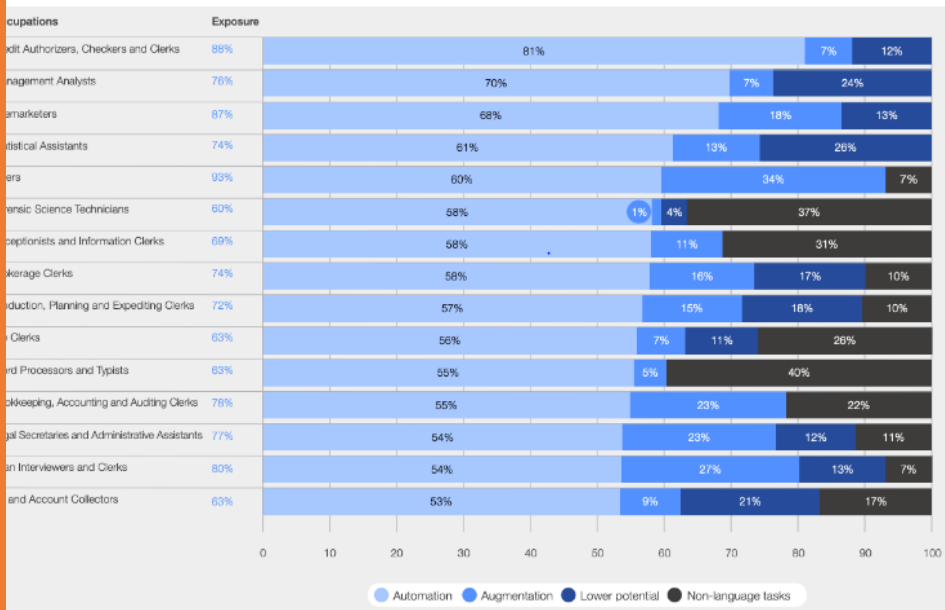
Policy – Certifying Learning

C. Contract cheating

- Acquiring or commissioning a piece of work, which is not the student's own and representing it as if it
- were, by:
 - i. purchasing the assessment task from a commercial service, including internet sites, whether prewritten or specially prepared for the student concerned
 - ii. submitting an assessment task produced by a third party, including a friend, family member, fellow student or a staff member of the University
 - iii. submitting an assessment task generated by an algorithm, computer generator or other artificial intelligence

[Contract cheating is, at minimum, Level 2 (Serious) Academic Misconduct in all instances]

(Student Integrity Policy, Schedule 3 – Examples of failure to meet student integrity requirements, p.7)



Jobs most exposed to automatization



Jobs most exposed to automation

(<https://cybernews.com/tech/ai-proof-jobs-matrix-help-determine-your-career/>)

Principles

Educational Experience

- Preparing students for employability (real world):
 - A shift from Knowledge and Skills to
 - Skills & Application
- Personalised learning experiences
- **Humanistic education**
 - Personal reflection and experiences
 - Emotions
 - Values
 - Critical analysis
- Enhancing research skills

Academic Integrity

- Certify student's learning
- **Raising awareness (process not product)**
 - Artificial Intelligence to enhance learning but not to produce an assessment product
- Equips students to participate ethically with AI
 - Referencing tools
- Assessment design
 - **Appropriate engagement with AI**
 - **Authentic assessment**
 - Criteria clearly communicated

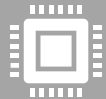
Risks

- Ethical
- Security
- Legal considerations

Building Trust



Community Engagement: Engage with diverse stakeholders, including employees, customers, regulators, and civil society organizations, to solicit feedback, address concerns, and build trust in AI initiatives. Foster transparency, openness, and collaboration in AI development and deployment processes.



Ethical Guidelines and Standards: Adhere to established ethical guidelines and standards for AI development and deployment, such as the IEEE Ethically Aligned Design, the EU's Ethics Guidelines for Trustworthy AI, or industry-specific codes of conduct. Align AI initiatives with principles of beneficence, non-maleficence, autonomy, and justice.



EXPERIMENT AND EXPERIMENT BRAVELY.

Flinders University Founding Vice-Chancellor
Professor Peter Karmel

Forever Fearless



Unlocking Australia's Future: Exploring the Power of AI



Panel Discussion

DutchSA – Adelaide Connected 7.1 – 2 May 2024



Q&A

- To effect change in any organisation – and introducing AI is significant change – how much emphasis have you had to put into the demonstrating the benefits of AI?
Recent Gartner research shows that currently about 52% of AI projects are successful. A key contributor to that number is the lack of direct benefit.
- When thinking through what organisations need to be successful with their AI journey, what are the ‘non-technical’, call them business considerations or enhancements that you would want the audience to think about?
- If you want to give one piece of advice to this audience – something they should start doing or thinking about tomorrow – with regards to the embracing of AI, what would that be?
- Many AI use cases are focused at improving process efficiency (sometimes even accuracy), but use cases where AI solves a big business or societal problem are few and far between. Can you give examples where AI has added great value and where Australia has the best opportunities to augment its export capabilities with AI?

Thank You!

