INFO 4990/5993
Peer review and feedback

The Learning Hub
Academic Language & Learning
sydney.edu.au/students/learning-hub

learninghub.aclanguage@sydney.edu.au

THE UNIVERSITY OF SYDNEY

Outcomes

You will:

- Review the purpose & structure of a literature review
- Identify common issues
- Share and review your writing
- Have time for independent writing and feedback

Assignment 2: What have you been asked to do?

THE UNIVERSITY OF SYDNEY

Task 1: Literature review

You have been asked to:

Produce a critical review of work related to your research topic

Establish what has been done before

Organise around questions/claims relevant to your research

Demonstrate where the literature agrees and disagrees

Highlight gaps in the literature

Identify strengths and weaknesses to establish the research gap

Assignment 2: Common content issues

THE UNIVERSITY OF SYDNEY

Introductions: Topic and background info

The field of data science and informatics in healthcare and medicine is a rapidly growing area especially with increasing availability and adoption of electronic health records (EHRs) [1]

Introduce topic

… this presents an opportunity to analyse this information in the form of interactive web-based visualisations. … Graphical representations … more effectively communicate information to human readers,… how humans interpret abstracted data and make decisions is known as 'sense-making'.

Outline core ideas

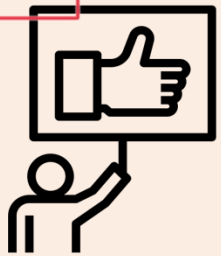
Introductions: Common issues

- Some papers launched straight into lit review
- Some omitted in-text citations in this section
- Remember to go from most general to more specific information

Review: Work with a partner

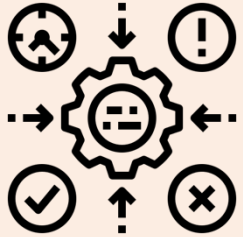
- road map
- Inverse pyramid

Read the introduction



Identify:

- Topic
- background information (+ citations),
- aim/purpose



Evaluate effectiveness and provide feedback

Organisation: Questions/claims relevant to your research

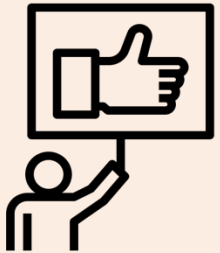
Source	Problem	Method	Results	Overall focus
(Source, date, page no.)	Comparison of 2 skin tone detection methods in 5 colour spaces (both non-parametric): Look-up table and Bayesian. Which performs better?	What similarities or differences can you identify?	Bayesian method resulted in ML and MAP depending on assumptions made. ML outperformed MAP technique and the lookup table method	Skin colour modelling techniques (non parametric)
(Source, date, page no.)	What is the best colour space selection for best skin tone selection?	Designed an optimum detector using the Neyman-Pearson test on conditional probabilities derived from normalises histogram of a database of images	Colour space does not influence performance as long as the optimum skin detector for that space is used	Colour space
(Source, date, page no.)	Survey of pixel-based skin colour detection techniques and evaluation of results. Which performs better?	Identified 3 elementary problems: choice of colour space, modelling of skin colour distribution, developing efficient processing algorithm. Survey first two.	Categorised skin colour modelling techniques Bayesian Skin Probability Map method best followed by maximum entropy model	Skin colour and colour space

Organisation: Common issues

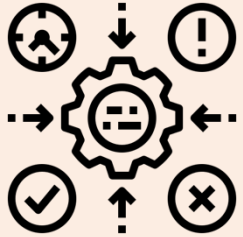
- Some papers seemed to simply describe different approaches/claims/questions
- Remember to focus on the literature (how does it support each approach/claim/question?)
- Consider which researchers make similar claims, which disagree

Review: Work with a partner

Skim for key questions / claims and check with partner



Analyse use of evidence to support approaches/claims



Evaluate effectiveness and provide feedback

Build towards your research gap

Strength

This study offers a statistically grounded challenge to the prevailing notion that certain colour spaces are inherently superior. Its use of formal hypothesis testing (Neyman-Pearson) lends methodological rigor to the findings (Lee & Rivera, 2022). However, the general applicability of the conclusion is undermined by the implicit assumption that an optimal detector is readily available or feasible to construct for each colour space. In real-world applications, developing such detectors may not be practical (Lee & Rivera, 2022).

Weakness

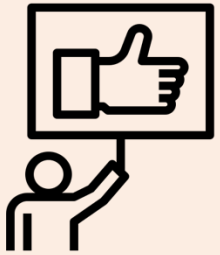
Gaps in the literature: Common issues

Remember to:

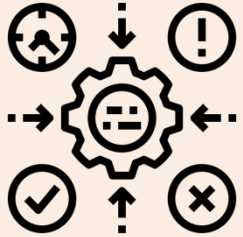
- Avoid one section at the end that evaluates strengths and limitations
- Identify strengths and limitations throughout the lit review (for each approach/question/claim)
- Build a case for the research gap

Review: Work with a partner

Identify where the writer has included strengths and limitations



Analyse how these relate to the research gap



Evaluate effectiveness and provide feedback

How you will be marked: Content

- Identifies relevant research questions
- Reviews conference papers, journal papers, and other work that are relevant to the identified research questions
- Selects papers that represent important work

How you will be marked: Content

- Demonstrates a very good understanding of the research contributions made and research methods used in the reviewed papers
- Provides a credible evaluation of the research literature in terms of how it contributes to the existing body of knowledge, tackling the identified research problem and gaps in the existing literature

Assignment 2: Common writing and citing issues

THE UNIVERSITY OF SYDNEY

The University of Sydney

How you will be marked: Writing

- Follows Academic English writing conventions
- Correctly formats in-text citations and reference list
- Does not primarily rely on an automated writing tool and/or generative AI tool.

Academic writing: Common issues

Remember to:

- Avoid starting with vague words (These days, nowadays)
- Proofread to identify run on sentences
- Write concisely (avoid over-wordiness)

Can you spot the issue?

Among the models evaluated, the **Bayesian Skin Probability Map** method emerged as the most effective, demonstrating superior performance in accurately identifying skin regions, this approach benefits from its ability to incorporate prior knowledge and model uncertainty, making it robust across varying conditions.

Can you make it more concise?

Among the models evaluated, the **Bayesian Skin Probability Map** method emerged as the most effective, demonstrating superior performance in accurately identifying skin regions. This approach benefits from its ability to incorporate prior knowledge and model uncertainty, making it robust across varying conditions.

Can you make it more concise?

~~Among the models evaluated,~~ the **Bayesian Skin Probability Map** method ~~emerged as~~ the most effective, ~~demonstrating superior performance~~ in accurately identifying skin regions. This approach benefits from its ability to incorporate prior knowledge and model uncertainty, making it robust across varying conditions.

Can you make it more concise?

The **Bayesian Skin Probability Map** method was the most effective, as it accurately identified skin regions. This approach is robust across varying conditions due to its ability to incorporate prior knowledge and model uncertainty.

Citing evidence: Common issues

Remember to:

- Correctly format in-text citations
- Check reference list rules

Library referencing guides

IEEE

https://www.library.sydney.edu.au/support/referencing/ieee

APA 7th

https://www.library.sydney.edu.au/support/referencing/apa-7th

Over to you: Questions, feedback, writing time

THE UNIVERSITY OF SYDNEY