

A Guide to Using AI <u>Tools</u> for Daily Workflows for Grad Students & Postdocs

Reimagining Professional Development Workshop by Shagun Gupta

Why use AI Tools?

- 1. It can significantly help you **improve efficiency** in areas not imaginable before. While you might not use it, you should try it out and know how to before you reject it.
- 2. They are easy to use. You don't need to know anything about AI.

How to use AI Tools?

- 1. Always check the output; never use the output as it is.
- 2. **Check the guidelines** for where work is being submitted. Some scientific journals have specific guidelines w.r.t. materials generated using AI.
- 3. Expect AI tools to reduce effort, not eradicate it.
- 4. According to the 80/20 rule, 80% of effort will produce 20% of the result. Use AI tools to **support your efforts.**

When to use AI Tools?

Do not use AI <u>Tools</u> for very easy/light tasks. Same way as you would not use Excel to add 2 numbers. Some use cases for AI tools are:

1. Replacement for other tools

Use in place of existing tools for simple tasks like searching very specific information, performing spell checks, and searching syntaxes.

2. Tedious tasks

Use for the first pass of tasks that require iterative refinement. For example, writing long emails for well-known topics like invitations to events, first draft of paragraphs from bullet points, rewriting certain materials with a different tone.

3. Rudimentary application of new skills

To perform tasks you have no skill in. For example, creating illustrations and animations for explanations, summarising information about a new topic.

Live ChatGPT Demonstration during Workshop

1. Search Tool

- a. "Syntax for pprint"
- b. "Syntax for MODULUS in Excel"
- c. "Perform Spell check for [text]"

2. Rewriting

- a. "Write as a paragraph [insert bullet points]"
- b. "Write more formally [insert text here]"
- c. "Rewrite [insert text here]"

3. New Tasks

a. "Convert code to pseudocode latex [insert equation here]"

Notes		