

Here’s the updated version of your **AI Usage Declaration Form** reflecting your recent HPC and MPI-related work for **HW4** instead of **HW2**.

# AI Usage Declaration Form

**Course:** MSIM 715

**Assignment Title:** HW4

**Student Name:** Liam Whitenack

**Date Submitted:** 10/22/2025

## Section 1 — Declaration of AI Use

I did use generative AI tools in completing this assignment, and I have documented all such use in Section 2.

## Section 2 — Details of AI Use (Required if AI was used)

AI Tool Name & Version	Prompts / Questions Used	Type of Output Received	How Output Was Used or Modified
ChatGPT 5	How to compile and run an MPI program using <code>mpifort</code> and <code>srun</code> on Wahab cluster	Step-by-step compilation and run instructions	
ChatGPT 5	How to interpret <code>srun</code> options such as <code>--nodes</code> , <code>--ntasks</code> , and <code>--ntasks-per-node</code>	Detailed explanation and examples	Used explanations to correctly configure my SLURM batch script to match available cluster node resources.
ChatGPT 5	How to use SLURM environment variables to manage parallel tasks and logging	Example SLURM script snippet	Modified my batch script to dynamically assign log file names and use environment variables for job configuration.
ChatGPT 5	How to interpret and format scaling results (e.g., tasks, cores, wall time, total primes) into Markdown table	Markdown formatting example	Used output formatting help to create a table summarizing performance data for the homework report.

## Section 3 — Student Acknowledgment

I understand that:

- I am responsible for ensuring that all work submitted is my own and that I fully understand any AI-assisted content included.
- All AI usage must be appropriately documented and substantially modified to reflect my own work.
- Misrepresenting AI-generated work as entirely my own without disclosure may be considered a violation of academic integrity.

**Signature:** Liam Whitenack

**Date:** 10/22/2025