Appendix – Project Registration Form

MCS COMMITTEE ON THE ETHICS OF RESEARCH

Registration of a Research Project

This form must be completed by the Researcher(s) and, in cases where the applicant is a student, the project Supervisor to determine if the project requires approval by the FSE Research Ethics Committee.

YOUR DETAILS	
First Name: Swoyam	**Surname:** Pokharel
Student Number: 2431342	**Supervisor:** Prakriti Regmi
Course: BSC. Hons	
Project Title: Oops!Mate	

YOUR PROJECT

State in no more than 100 words the problem(s) your project is aiming to address

Chess engine development involves numerous optimization techniques, but their individual effects on playing strength are not objectively defined. OopsMate aims to systematically evaluates these techniques by building a chess engine incrementally in Rust, starting from foundational components (bitboards, PEXT, magic bitboards, PST, tapered evaluation, negamax) and progressively adding optimizations such as alpha-beta pruning, transposition tables, iterative deepening, and quiescence search. The aim is to implement and benchmark popular techniques concerning move ordering heuristics, pruning strategies, and state-of-the-art evaluation methods like NNUE. Each addition is benchmarked against previous versions and Stockfish through 100-game matches to measure Elo impact.

Will the information or artefact resulting from your project be available externally to the University?	YES / ~~NO~~ If yes, please complete an <u>External Agreement Form</u>

Will your project involve:
  (a) **Human participants**
  (b) **Data about humans**
  (c) **Sensitive information**
	YES / ~~NO~~
	
	If yes, please complete Page 2 of this form. Otherwise, please sign the top of Page 3, and if necessary pass it on to your supervisor.

Human participants	Yes	No
• If your proposal involves healthy adult participants, does the project have characteristics that may be detrimental to their physical or mental wellbeing?		
• Does the proposal involve vulnerable participants (for example, are they under 18 years of age, do they have a disability or are mentally unable to consent)?		
Privacy		
• Does the proposal involve processing of genetic information or personal data (e.g. health, sexual lifestyle, ethnicity, political opinion, religious or philosophical conviction)		
• Does the proposal involve tracking the location or observation of people without their knowledge?		
Research on Animals		
• Does the proposal involve research with animals?		
Research Involving Developing Countries		
• Is any of the research involving one of the Least Developed Countries?		
Dual Use		
• Does the research have direct military application?		
• Does the research have the potential for terrorist abuse?		

This form should be filled in and submitted to the corresponding assignment on Canvas by the student (in the case of student applicants).
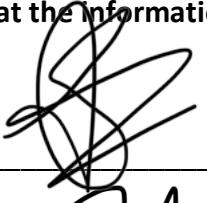
Print this page and fill in with your supervisor (the student may also want a copy for themselves).

Project Title:

Student Name: Swoyam Pokharel

Student Number: 2431342

Supervisor Name: Prakriti Regmi

☑ **We confirm that the information given in this form is true, complete and accurate.**

Student Signature: _____ Date: 2025-11-20

Supervisor Signature: _____ Date: 2025-11-20

Thank you for completing this form. The MCS Ethics Committee will process the information provided and inform you of their decision shortly.

FOR MCS ETHICS COMMITTEE USE ONLY

The MCS Ethics Committee:

☐ approves this project. You may proceed with your project.

☐ your project requires approval by the FSE Research Ethics Committee. Please complete the **MCS_REC_Application Form.**

Project Coordinator Signature (if applicable) _____ Date: _____