

# Northern Michigan University (Marquette Co, MI)

## CS 556-01-24W: Functional Programming

### Program 3

Due: Wednesday 27 March 2024 11:00 A.M. EDT

Create a folder called “PG3” in the top level of your CS556-01-24W folder. Place all files pertaining to this assignment into the top level of your PG3 folder. Place a (possibly empty) file called “DONE” into this folder when you are ready to have your programs graded. The only files you need to turn in are the .lisp files. Please don't turn in any files other than these!!

Using LISP, write an interactive Othello game. The computer should use alpha-beta pruning to determine its move: the computer should move in such a way to maximize the following value in five moves:  $\langle \text{computer discs} \rangle - \langle \text{human discs} \rangle$ . In other words, assuming the human makes the best possible move, the computer should place the disc to give it the best advantage in five moves. (Five human moves and five computer moves.)