

# Fast weight programmers implementation

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# 1 Objective

**Proposition 1** *If a FWP and a weighted matrix are to play the same game of checkers with no training phase the FWP will play more efficiently.*

## 2

## 3

# 4 Literature Review

# 5 Methods

## 5.1 American checkers rules

- played on a board perfectly latticed board
- pieces can move forward unless capturing
- to capture a piece must jump another piece (of opposite loyalty) diagonally forward
- pieces that reach the opposite side promote to "kings"
- "kings" can capture forward or backward

## 5.2 Experiment states

The different iterations serve to symbolize different stages of internal development. I devise the different stages by the amount of weakenings placed on the problem. We begin with a proposition 1, then create stages by applying weakenings to the problem such that proving these weakened stages will bring us closer to proving our original proposition<sup>1</sup>.

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<sup>1</sup>Such is the format for any complex direct proof