Demo 2: Blind Chess Logic Implementation

Successfully developed core logic for a blind chess game variant where the chess engine operates without full board visibility. This implementation simulates imperfect information gameplay inspired by Reconnaissance Blind Chess concepts.

Game State Management

Move generation and validation enabled despite limited visibility of opponent pieces

Sensing Mechanism

Designed partial board information revelation per turn to create strategic uncertainty

Strategic Foundation

Implemented decision-making logic that adapts to incomplete information scenarios

MuJoCo Integration & Future Direction

Initiated integration of MuJoCo physics simulator with chess logic to create dynamic visualization of gameplay. This bridges AI decision-making with realistic robotic simulation for enhanced demonstration capabilities.

→ Communication Pipeline

Established initial connection between chess engine and MuJoCo physics environment for real-time data exchange

→ Physics Environment

Modeled chess pieces and board within MuJoCo to enable realistic movement simulation

→ Synchronized Visualization

Chess moves will translate to physical manipulations observable in MuJoCo simulation

Next Phase: Complete physics-based piece movement, enhance AI with MuJoCo feedback, and deliver integrated real-time demo showcasing blind chess logic synchronized with robotic simulation.