A Genetic Algorithm Bots Game (GABot)

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Programming Language C++, Qt Toolkit

Platform Linux with XFree86 Support

Game Play Similar to hockey. This game is played in an arena with the ball initially placed in the middle of the arena, and there are two teams of players (bots) trying to score goals.

- **Structure of the Genetic Algorithm code**

  - Genetic Algorithm Rule

GARule
-Sensors : Thing [8] -MyBall : boolean -TeamBall : int -Fire : boolean -Move : boolean -Turn : Rotation

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  - Fitness Function

  - Crossover / Mutation of bots

- **Structure of the Arena code**

  - Grid, Display

  - Ball and Bots representations

- Structure of the Data code

  - XML

- Development Difficulties

- Future Development

- Demo 1: Team Bob vs. Team Richard

- Demo 2: Stochastic vs. Stochastic