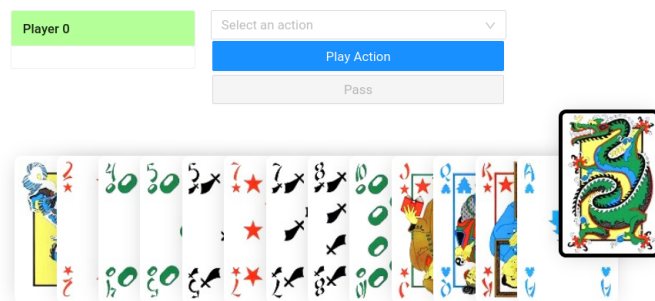




Tichu AI and Server

*Tichu*¹ is a popular Swiss card game in which 4 players take turns playing (a set of) cards. Players are split into two competing teams, so there is both a cooperative and a competitive component to consider if one wants to master the game. But what to do when there are not precisely 4 players available?

In our group, we already created a reinforcement learning agent to play Tichu and replace missing players. There is also a first UI that allows users to play against the agent and each other. In this project, we want to expand the UI to a fully functional web interface including a user-based ranking system. Users should be able to register and play against friends or random people. A matchmaking system could ensure fair and exciting games, and reduce waiting times by putting people together who want to play at the same time. The reinforcement learning agent could act as a replacement for missing players. Furthermore, we want to research ways to include the AI agent to give an initial rank to players.



Requirements: The project will involve a fair amount of programming, in particular web development. Therefore previous experience and interest in these fields is an advantage. Also, there will be some exposure to reinforcement learning. We will have weekly meetings to address questions, discuss progress and think about future ideas. We recommend enjoying Tichu!

Interested? Please contact us for more details!

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¹<https://de.wikipedia.org/wiki/Tichu>