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# **Project Title**

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Games such as chess where there needs to be two players, can become a problem when there isn't a second person available to play as we have seen in these times of isolation due to COVID-19. Inspired by other robotic chess playing agents, we propose a portable, with less additional equipment robot using an ubiquitous approach to the board as well as offering an expansion for other board games and a coaching component.

Key Words: Artificial Intelligence, robotics, image processing, computer vision

#### INTRODUCTION

Test [Chen and WangChen and Wang2019] Test2 [Rath, Mahapatro, Nath, and DashRath et al.2019]

# **PROPOSED METHODS**

## ANTICIPATED RESULTS

### REFERENCES

[Chen and WangChen and Wang2019] Andrew Tzer-Yeu Chen and Kevin I-Kai Wang. 2019. Robust computer vision chess analysis and interaction with a humanoid robot. Computers 8, 1 (2019), 14.

[Rath, Mahapatro, Nath, and DashRath et al.2019] Prabin Kumar Rath, Neelam Mahapatro, Prasanmit Nath, and Ratnakar Dash. 2019. Autonomous Chess Playing Robot. In 2019 28th IEEE International Conference on Robot and Human Interactive Communication (RO-MAN). IEEE, 1–6.

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