

# REMOTE CHESS

*Dylan Ferris and Austin Welch*  
Undergraduate Students, Computer Engineering



Inspired by their desire to **connect with friends across great distances**, Dylan Ferris and Austin Welch developed a pair of connected chessboards that create a seamless online multiplayer experience.

The **IoT (Internet of Things)** Connected Chessboards help people share the classic pastime of chess from anywhere, while still preserving the look and gameplay of a real chess game.

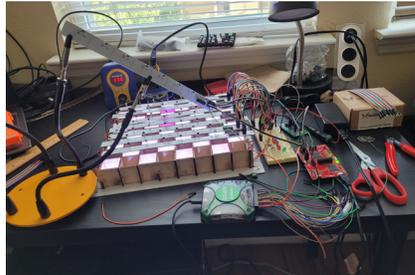
The boards are also a great **learning tool** to help learn the rules of chess or sharpen skills against an AI.

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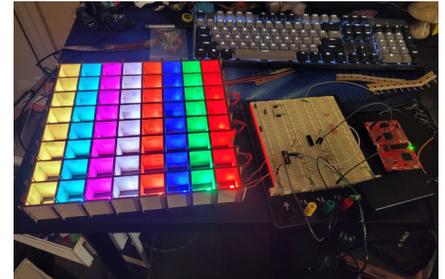
“Working on this project was an incredible experience that truly showed me how much I have developed during my time at University of Florida, not only as a developing engineer but as a person as well. Just the fact that we were able to take this idea, something that only existed within our minds, and bring it to life was something I only could dream of when I was younger.”

**AUSTIN WELCH**

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Early in the assembly of the boards, showing the cell structure, LEDs, and PCBs in place.



Testing the board with LED lights, which are used to indicate possible moves.



Austin (left) and Dylan (center) test their chess boards with Dr. John Harris, chair of the Department of Electrical and Computer Engineering at University of Florida, in October 2021.

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“During development of the project, we met a long-time employee from the Tacachale Center here in Gainesville, which specializes in teaching people with learning and mental disabilities. He said that they often use chess to help build their logic and socialization skills, but that they would often struggle with learning the game and memorizing all the pieces and rules. We believe that with further development this could be a great tool for places like the Tacachale Center.”

**DYLAN FERRIS**

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