During chess matches, human experts or the players in the match must manually transcribe moves from the positions on the board, which is inconvenient and leaves room for error. Convolutional neural networks are capable of detecting complex shapes like chess pieces, and modified Hough transforms can detect partially obscured parallel lines, like those found on chess boards. By combining piece detection from a CNN with board detection from a Hough transform, we will be able to automate chess move transcription with accuracy from a phone camera.