

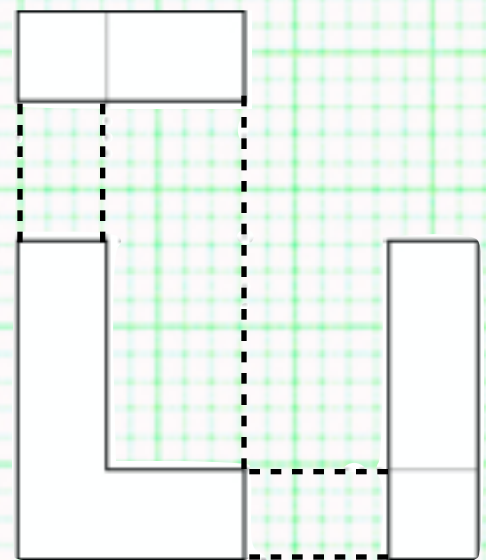
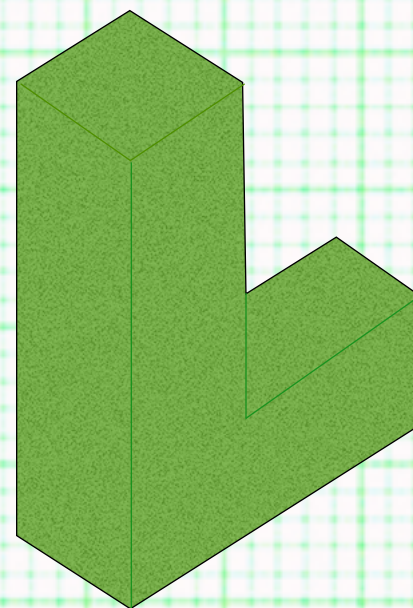


# ORTHO PUZZLE

Learn 3D geometry the fun way

## WHAT IS IT?

ORTHO PUZZLE is a physical meets digital game for teaching school children orthographic projections. The child learns by making various geometric shapes in the physical world.



## WHAT IS THE IDEA?

Visualizing a complex 3D object from just its orthographic projections is difficult. A better sense of understanding can be developed by constructing and manipulating the object in the physical world.

## HOW TO PLAY?

The android app shows two orthographic projections of a 3D object to the player. The player then tries to build the matching object using square blocks and then verifies the same using the app.

## HOW DOES IT WORK?

The Android app uses a video camera to capture the built object, then connects to Open CV to detect the square blocks. Some additional logic detects the relationship between the detected objects.