StructionSite Take-Home Project

Goal: generate the path that was walked by the user while they recorded this omnidirectional video. We'd like to see the locations of the path projected onto this top-down image. The green dot is the starting point, and the red dot is the ending point.



Please explain your techniques and assumptions both in a writeup and (as appropriate) in comments. Use any programming language you like.

Data:

https://drive.google.com/drive/folders/1EeIHVPEV_mWkdEwPz_vRjz-o6xAtnA80

The folder contains a video (with equirectangular camera model), the overhead map, and a subfolder with frames extracted at 2 fps.

Please spend no more than 2, maybe 3 hours on this. We have work-life balance here at StructionSite. :) This is too hard a problem to fully solve in a couple hours; what we're looking for are proof that you can code, proof that you have some domain knowledge, and proof that you can come up with good ideas and translate them to code.