In order to try to optimize the reconstitution of 3D objects, we have coded and studied the “visual hull” algorithm, studied namely by B. Baumgart and A. Laurentini. It has the advantages of being pretty light and easily understandable. I also proved that in ideal cases, the method theorically returns a model that is not too far from the original.

We implemented this algorithm using Python. I built the 3D modeling system and the algorithms needed, whereas my partner coded the image processing part.