Similar Products

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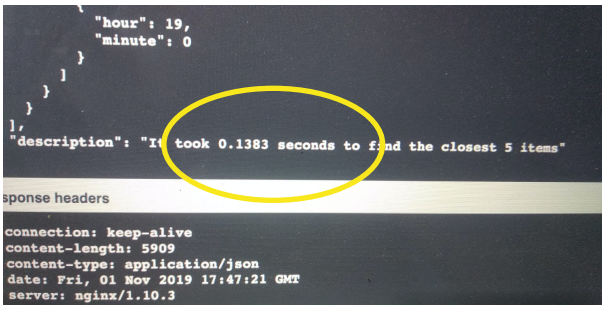
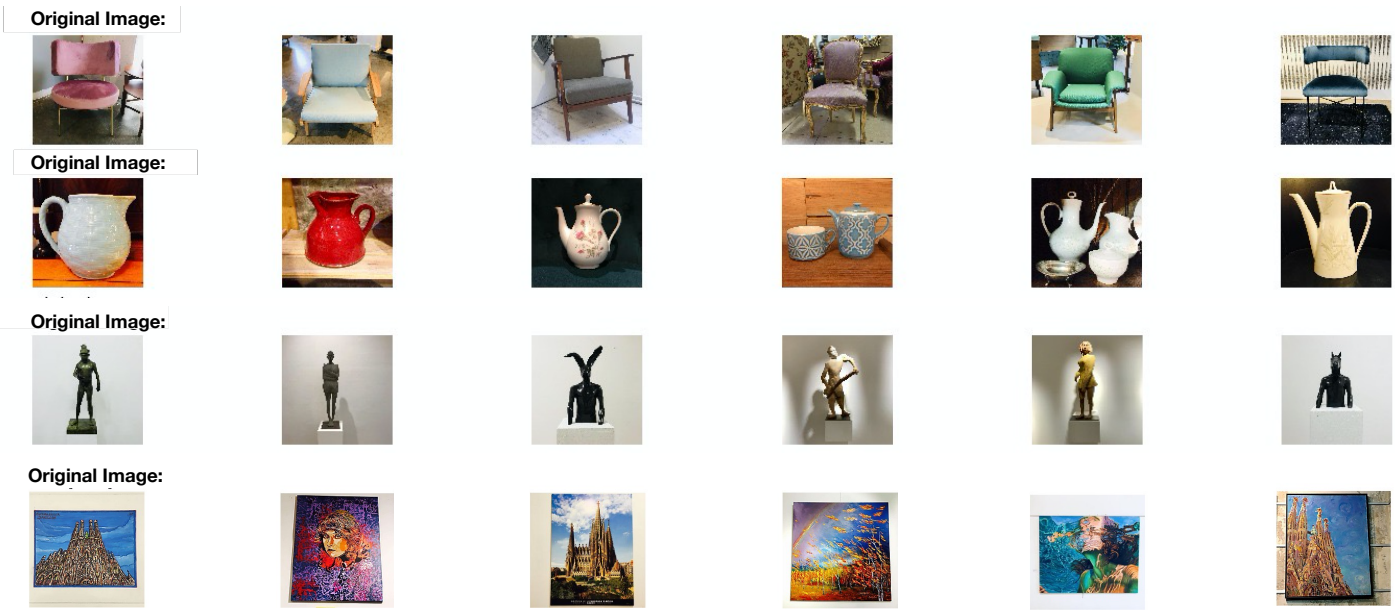
AI Engine:

Yuge makes use of the Extractory (www.extractory.com) API for all of it's AI related features, such as Similar Products recommendations. Below explains in a bit more detail to what is actually happening from an AI standpoint of view on the main interface of the Yuge AR glasses App on the Blade. The purpose of the Similar Products feature is to return you similar items from any picture you take of a product at home or for example in another shop.

For this feature we took a sample of product pictures, equally divided over our merchants in certain categories and cities. We created a Deep Learning pipeline where we've trained an AI model to recognise similar items. As an end result we were able to establish an algorithm prediction time, that in a cloud based production environment only takes **0.1382** seconds over the entire product Database.



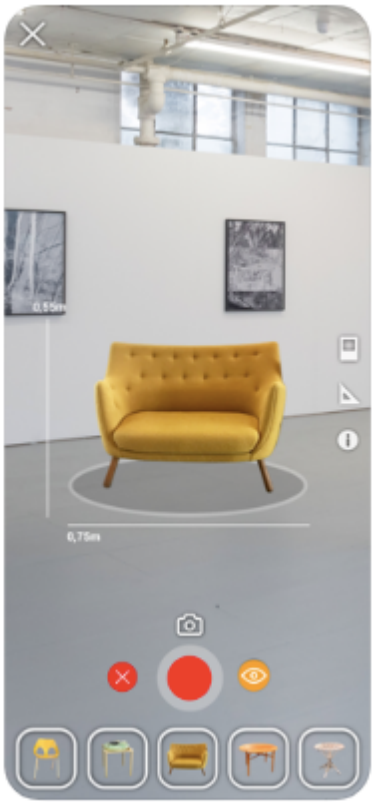
It is important to mention that our product listings are NOT tagged by hand. It is a system that is continuously training and improving itself and returns results, of which we on forehand have no idea what it will be. Below are some examples of items that were returned (right) based on an original input image (left). We especially like the Barcelona Sagrada Familia results of row 4.



About Yuge

Yuge is an AR platform for local shops. Yuge launched beginning of 2016 in Barcelona, followed by Amsterdam in 2017 and Berlin, Paris and London in 2018. This year (2019) we also added San Francisco and New York.

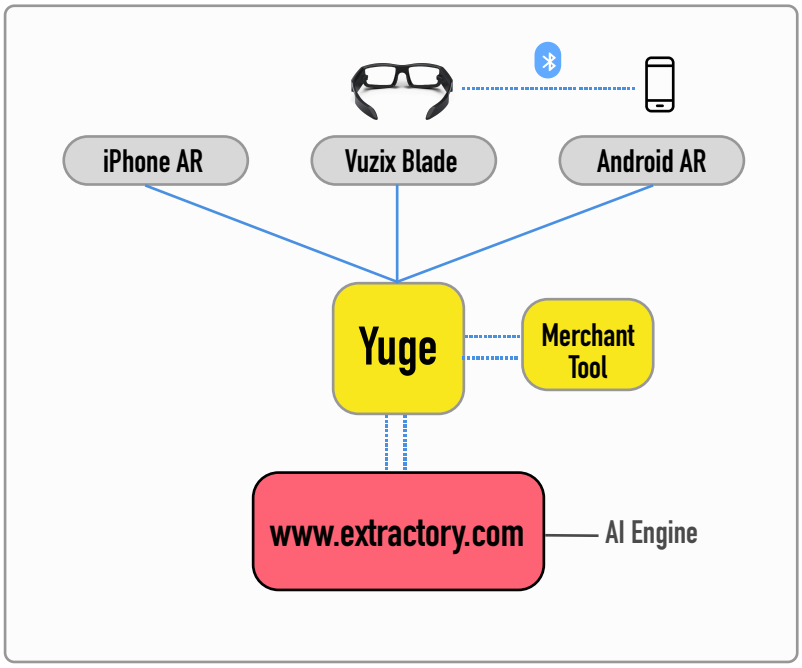
The purpose of the platform is to allow the local shops to visualise their products with AR without having to make expensive 3D renders. We offer an inexpensive alternative to for what example IKEA and Target do with their custom AR Apps. These large retail chains have the budget to design and render 3D models for simply all of their products. But for the local mom and pop, brick and mortar shops, and even larger retail stores, this is just not possible.



That is where Yuge comes into play. Our Deep Learning tech extracts products from existing photography and then uses the exact same AR tech to visualise products with remarkably realistic results.

Of course, for stores who do have 3D models, they can also upload 3D renders onto our platform, so we do in fact service both 2D and 3D Augmented Reality.

Eco System:



Product Extractions

3

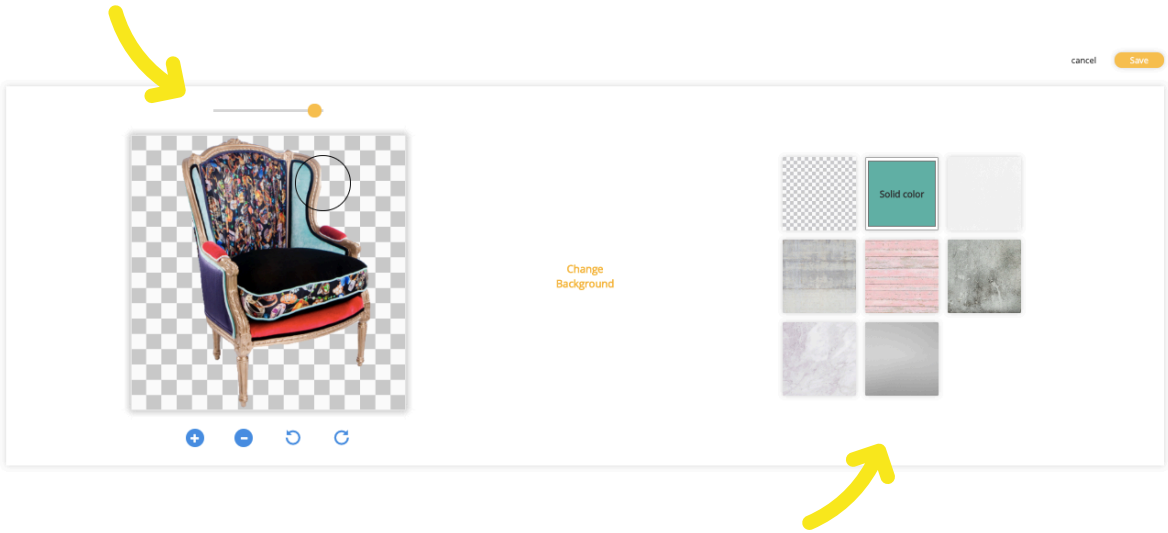
Remove backgrounds:

Again we use Extractory's API for this feature. Extractory has specifically trained models to detect and extract products from their background. And as the app on the Blade is connected to the Extractory backend, it means that whenever a merchant uploads a new product (photo), this product will instantly become visible on the Yuge Apps. Everything happens in in real time:

Store Extraction Blade

Editing tool:

In the event the automatically extracted product from which the background is removed did not turn out as expected, then we have an Editing tool to tweak the end result. The merchant can erase any remaining bits of the background till it is ok, and then save it like that.



The tool also allows merchants to add a different background to their products. You can choose all kinds of different colors, or natural backgrounds like soft marble, wood or vintage concrete. You can also upload your own custom backgrounds.