3.5 mn

children/teens get orthodontic treatment every year

24 mths

average duration of a complete orthodontic treatment

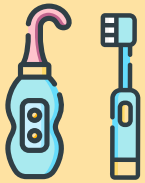
$6000

average cost of an orthodontic treatment, though it can go from $3000-$10000

ORTHO MORPH

Image morphing applied on orthodontic images

ORTHOMORPH



WHAT IT DOES?

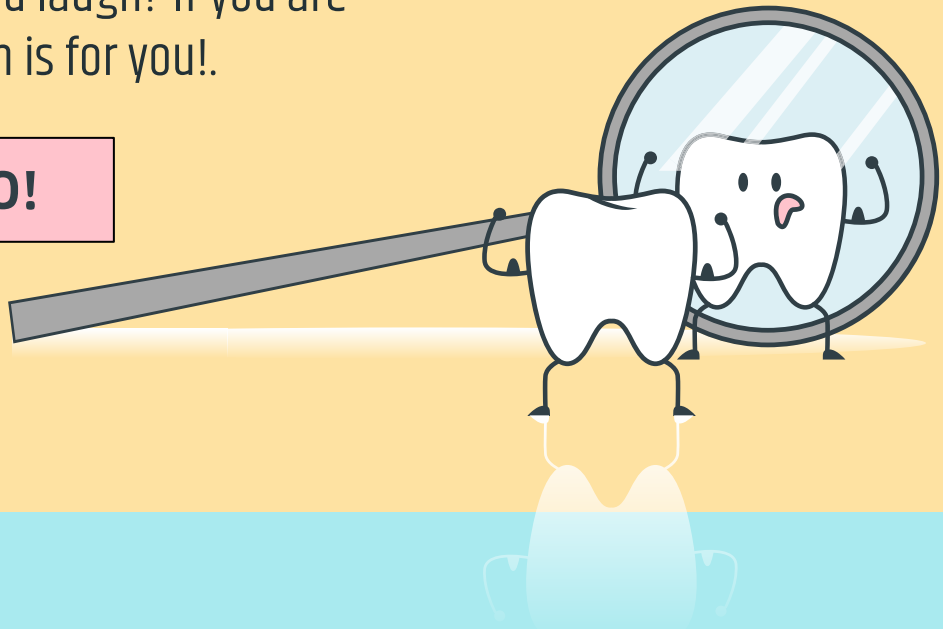
Use image morphing on pre and post-treatment images to visualise the transition of a person's teeth and facial features

WHAT WE WANT TO DO?

Help reduce misunderstandings and phobia of orthodontic treatment among people and help them make informed decisions. Help doctors improve their treatment plans.

Do you smile with your lips closed? Do you cover your mouth with your hand while you laugh? If you are considering braces, OrthoMorph is for you!.

LET'S CHECK THE DEMO!



UPPER LINGUAL ARCH

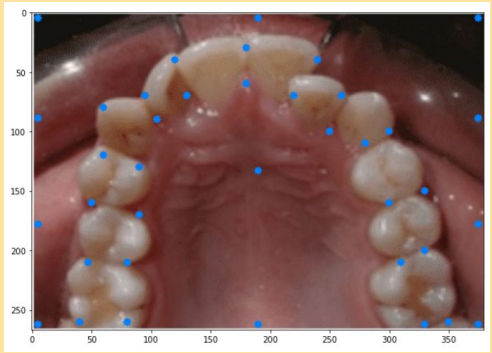
Source Image

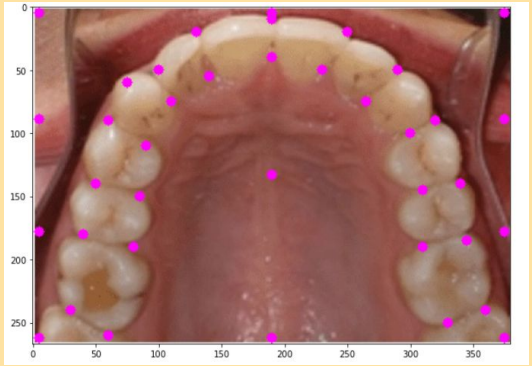
Morphing Video

Target Image

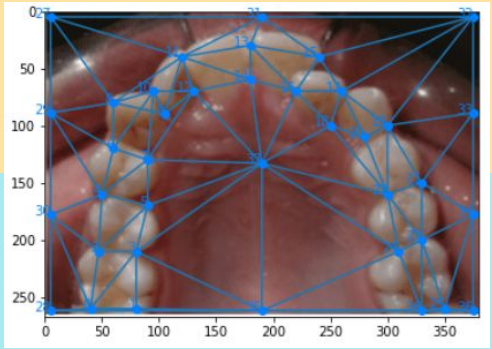
UPPER LINGUAL ARCH

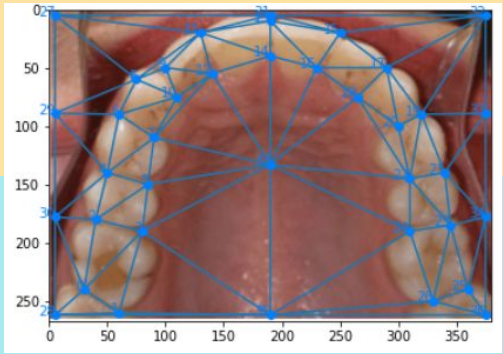
Corresponding Points for Mesh generation





Triangulated Mesh for obtaining intermediate image





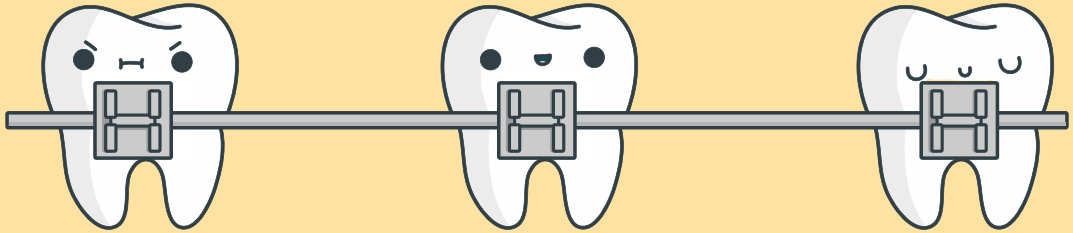
FRONTAL FACE

Source Image

Morphing Video

Target Image

ADVANTAGES



FOR ORTHODONTISTS

Showing prospective patients how their teeth will transition from their current state to the final state (facial features as well as teeth)

FOR MEDICAL STUDENTS

People interested in getting braces can upload their dental images on a website and visualise how their teeth will reposition.

FOR PROSPECTIVE PATIENTS

The usefulness of this technique is also for the education of medical students and orthodontic residents to learn about the variations during treatment

FUTURE SCOPE

MECHANICS

Finite Element Methods can be applied on the mesh to back-calculate the wiring that needs to be done to apply the adequate force and get the required transformation.

X-RAYS

Can be applied to images obtained from X-Rays. Will also be applied to other pre and post-treatment images

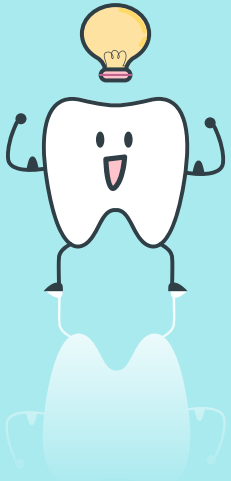
SOFTWARE

Publish a software/website where patients can upload their current teeth image and get a video of the possible transformation

THANKS!

Does anyone have any questions?

mjtanyagupta@gmail.com
orthomorph.co



CREDITS

This is where you give credit to the ones who are part of this project.

- Presentation template by Slidesgo
- Icons by Flaticon
- Infographics by Freepik
- Images created by Freepik
- Author introduction slide photo created by Freepik
- Text & Image slide photo created by Freepik.com