Innovation in Eyewear: Automating Virtual Try-Ons with Artificial Intelligence

Prof. Dr. Artūras Serackis, Vilnius Gediminas Technical University (VILNIUS TECH)





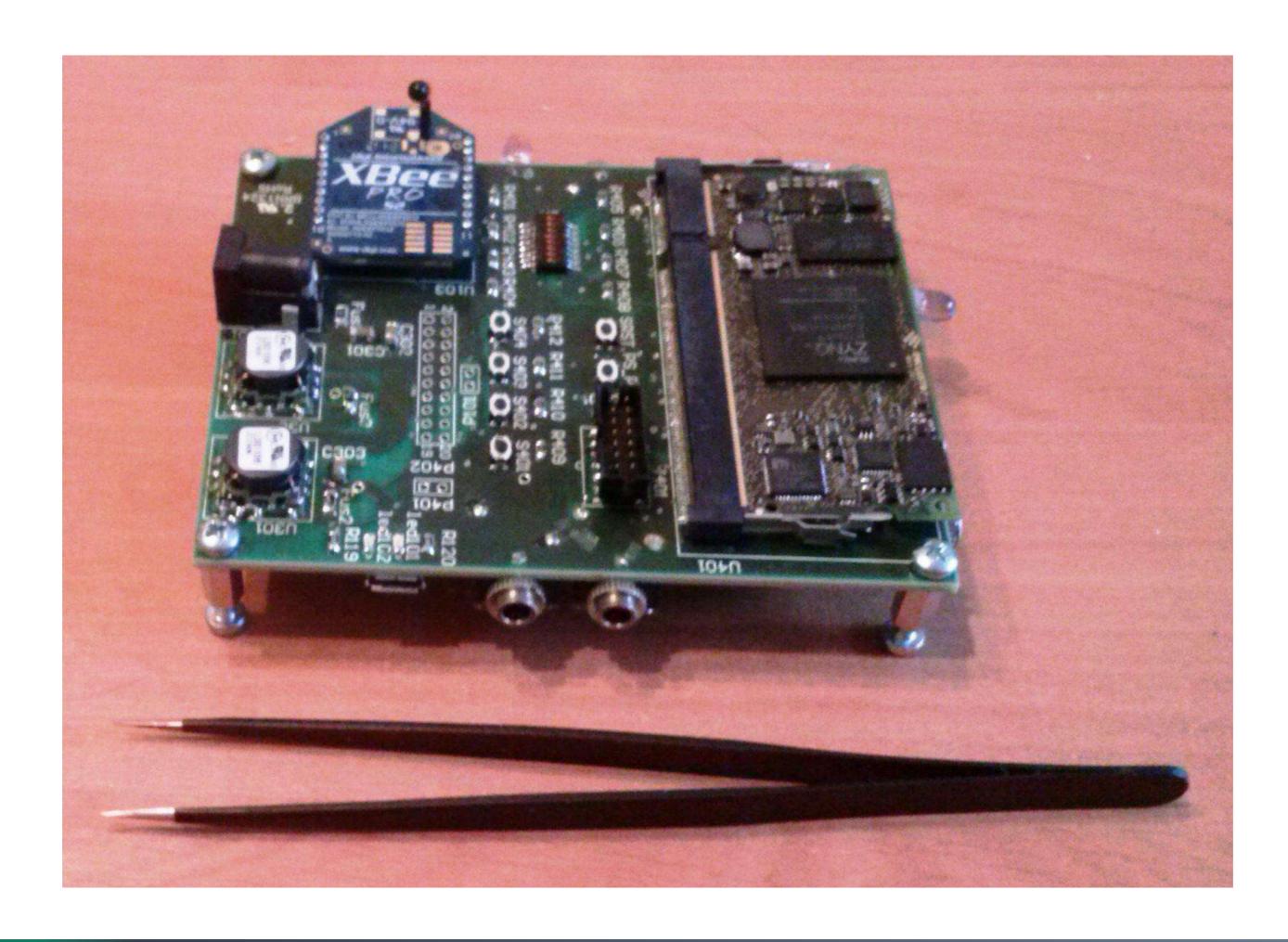








Past projects



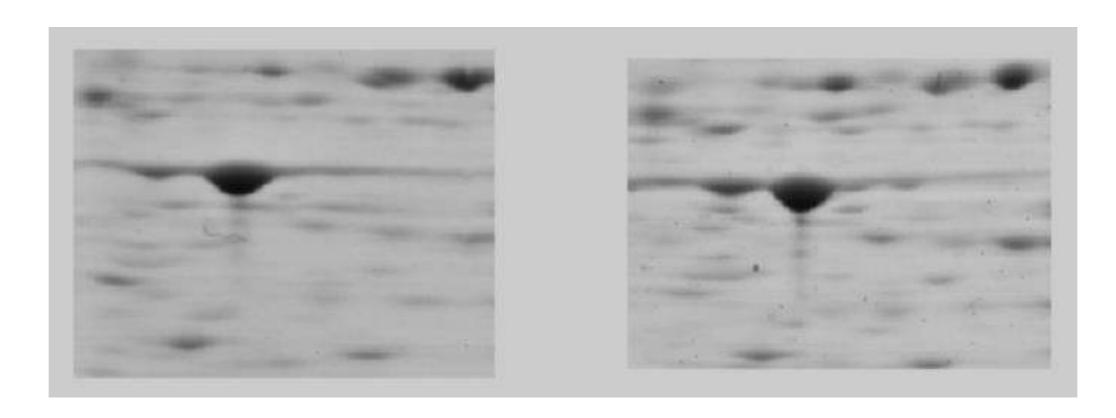


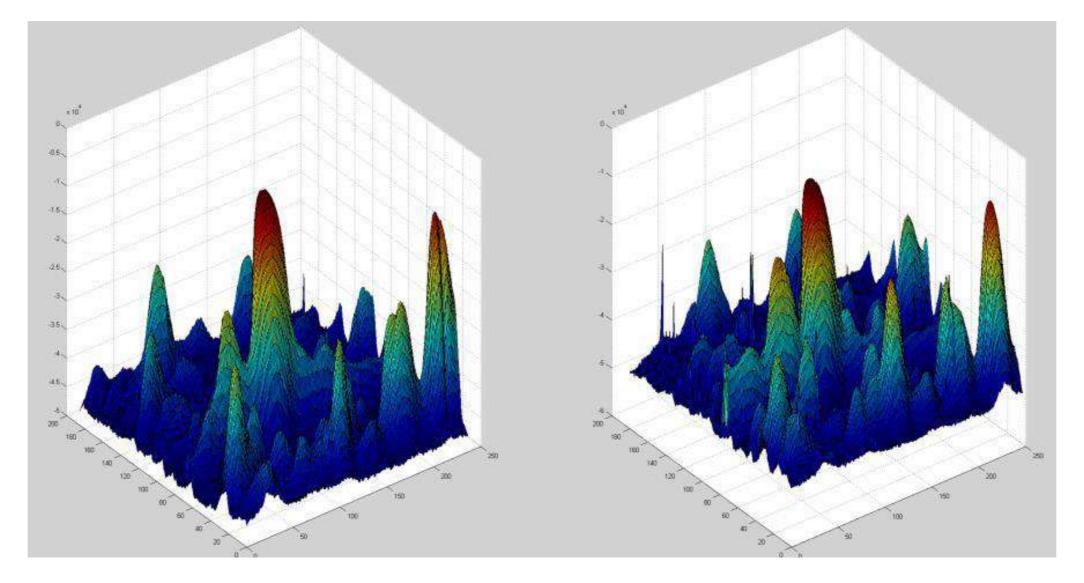






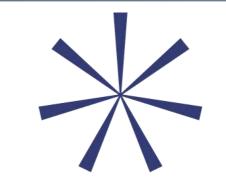
Past projects (2)









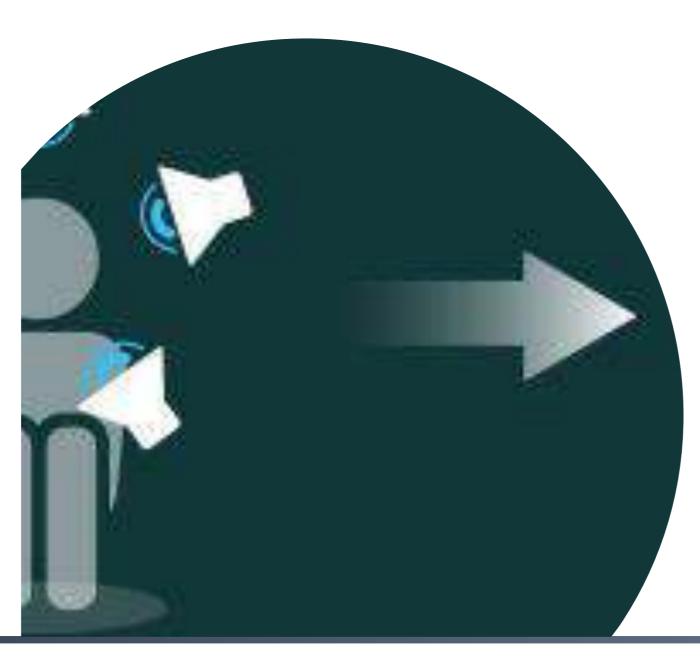


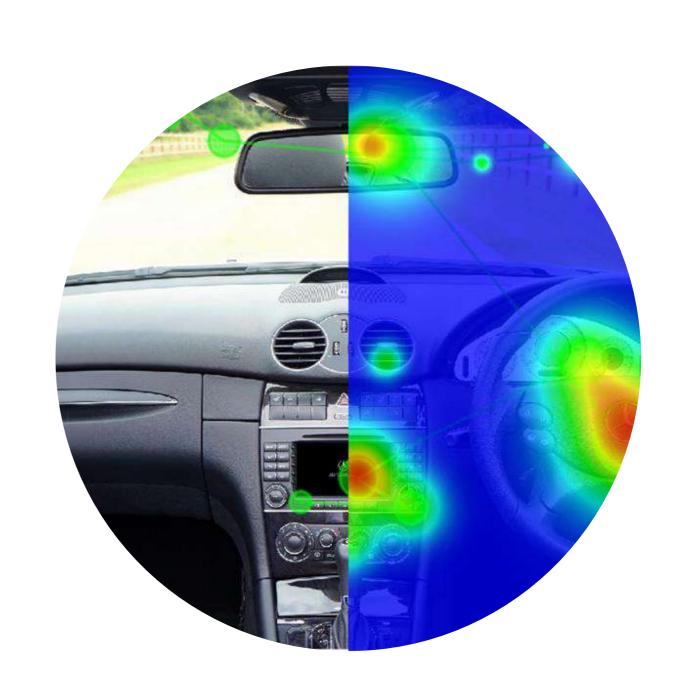




Past projects (3)







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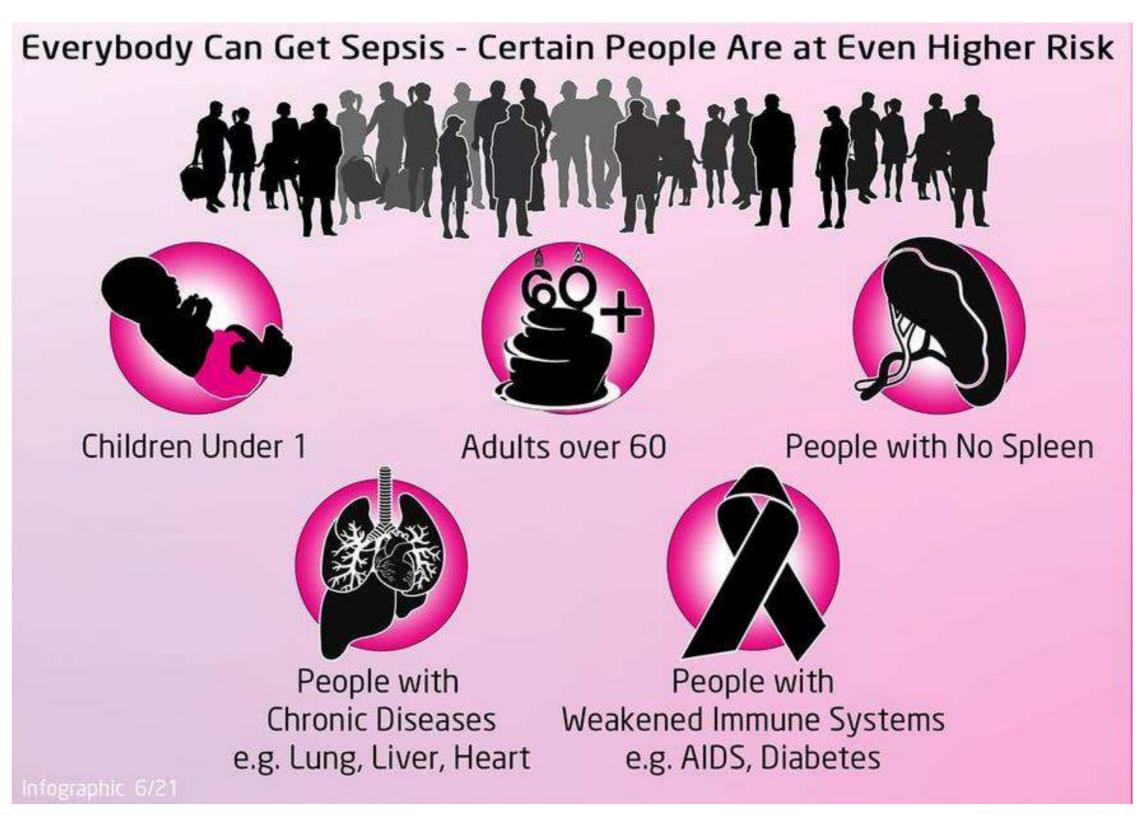






Past projects (4)



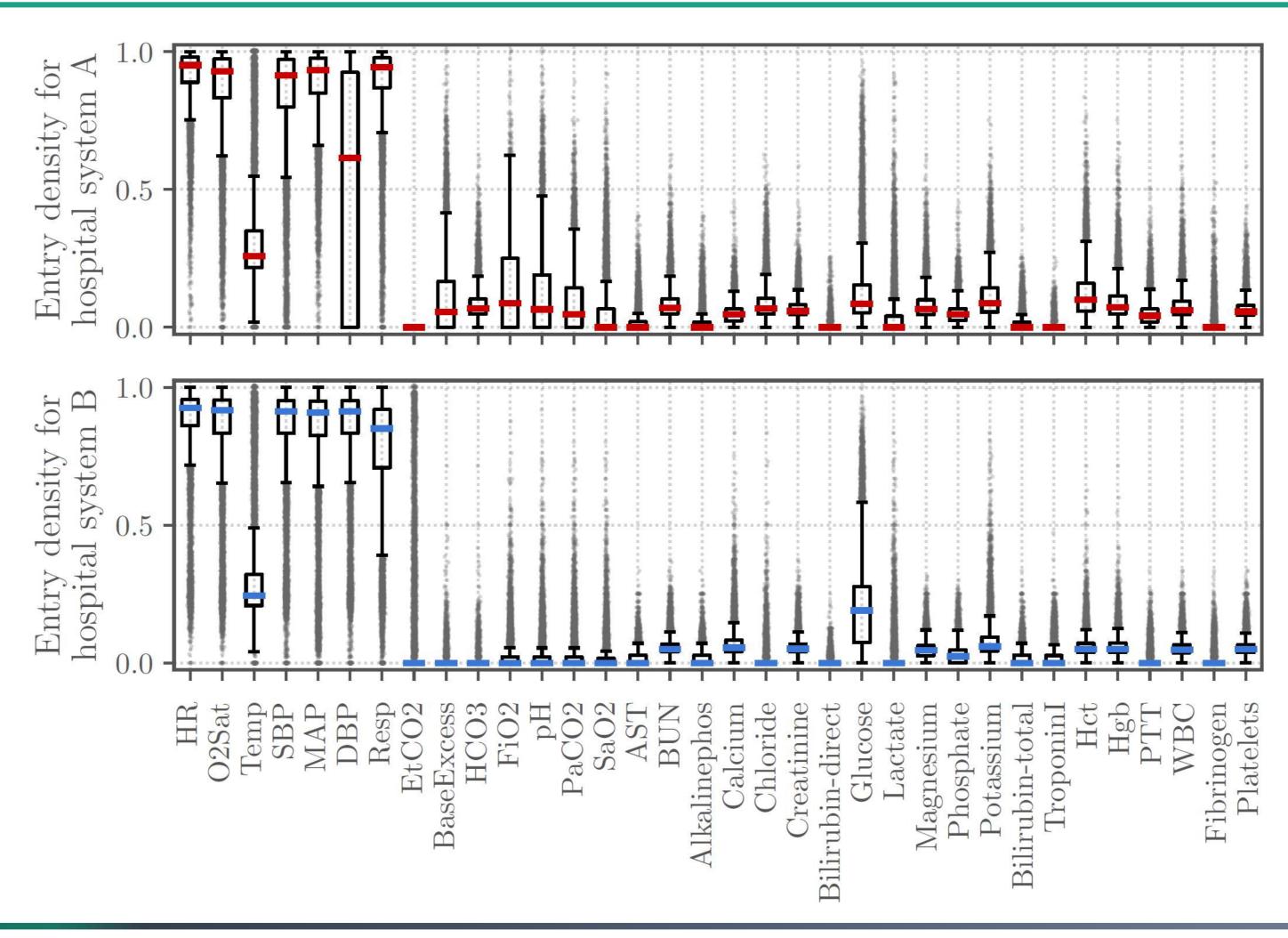








Past projects (5)



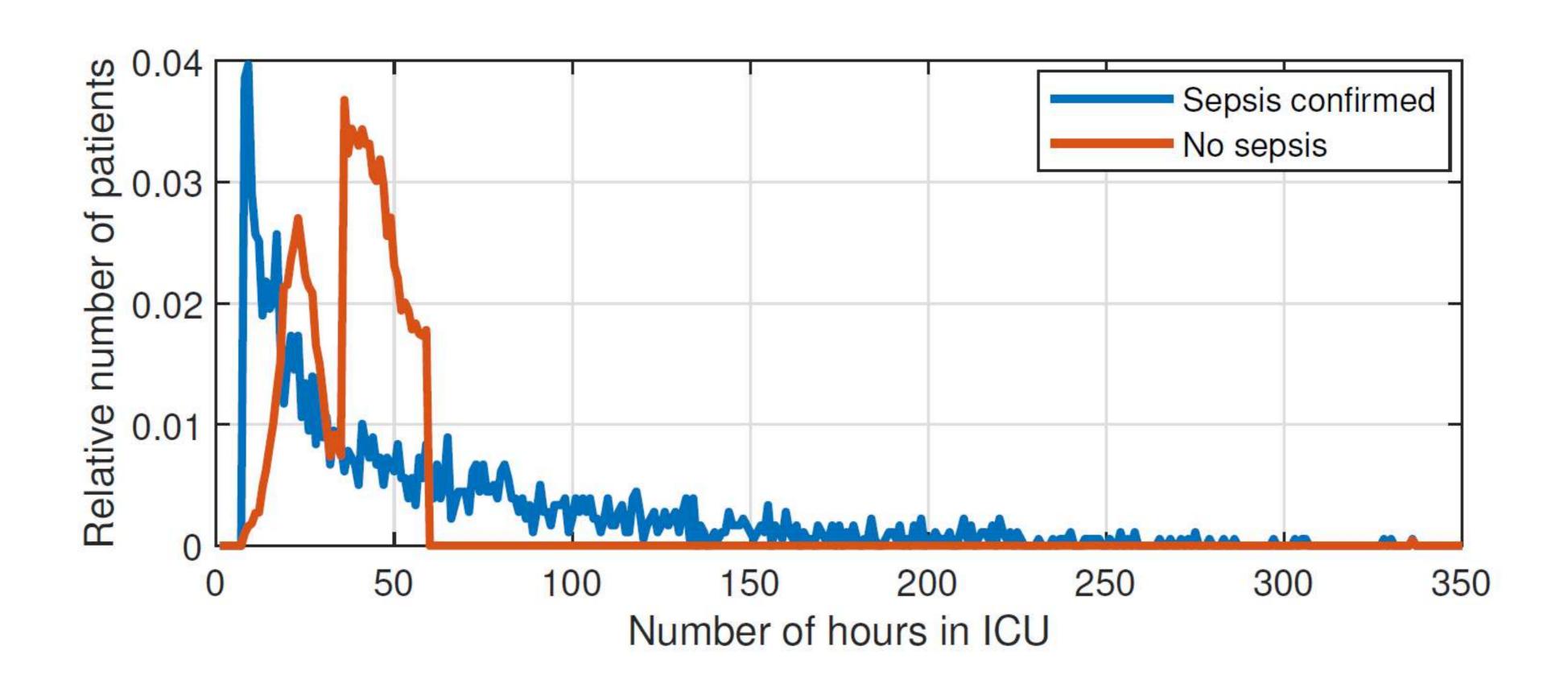








Past projects (6)









Past projects (7)





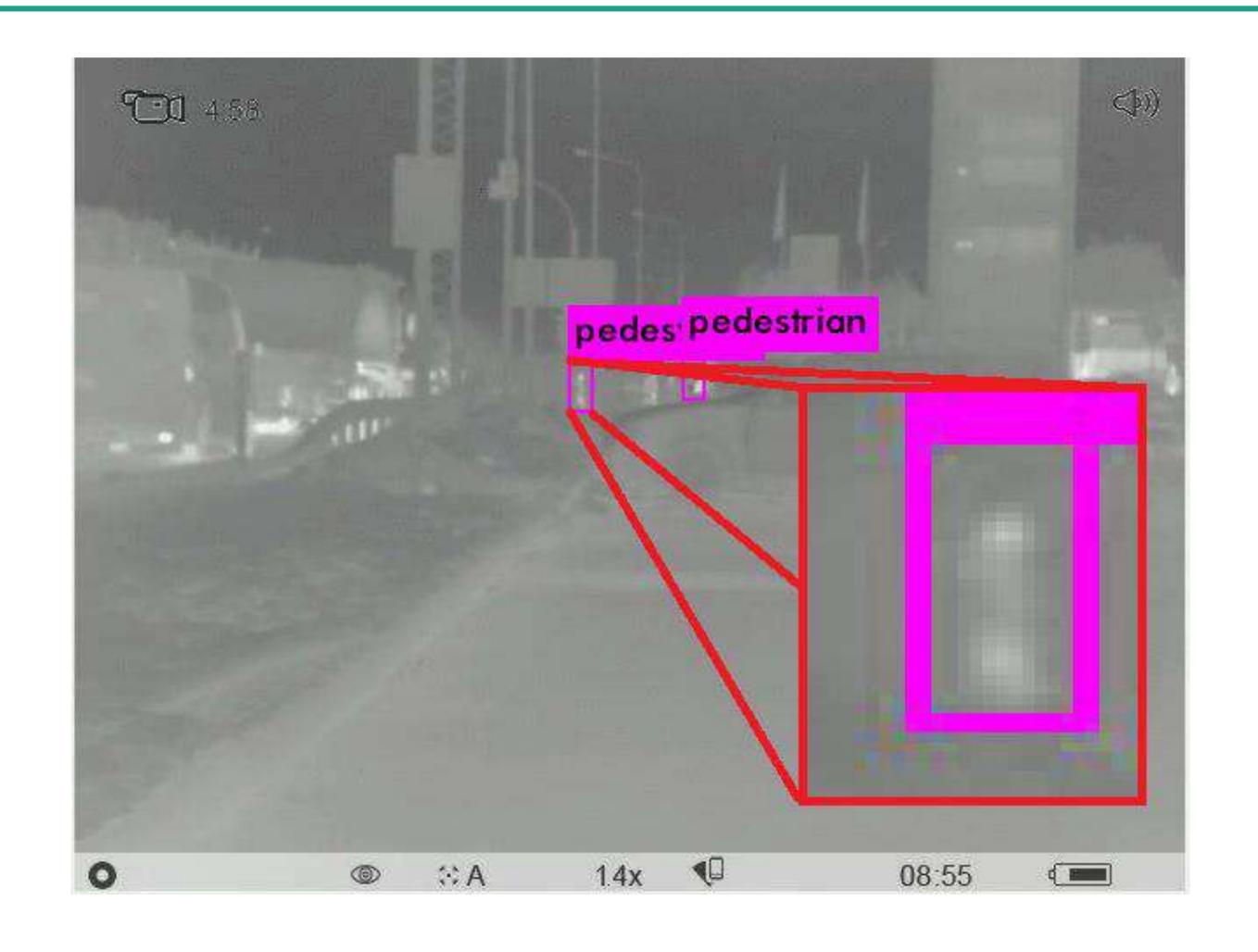








Past projects (8)











Past projects (9)











Past projects (10)



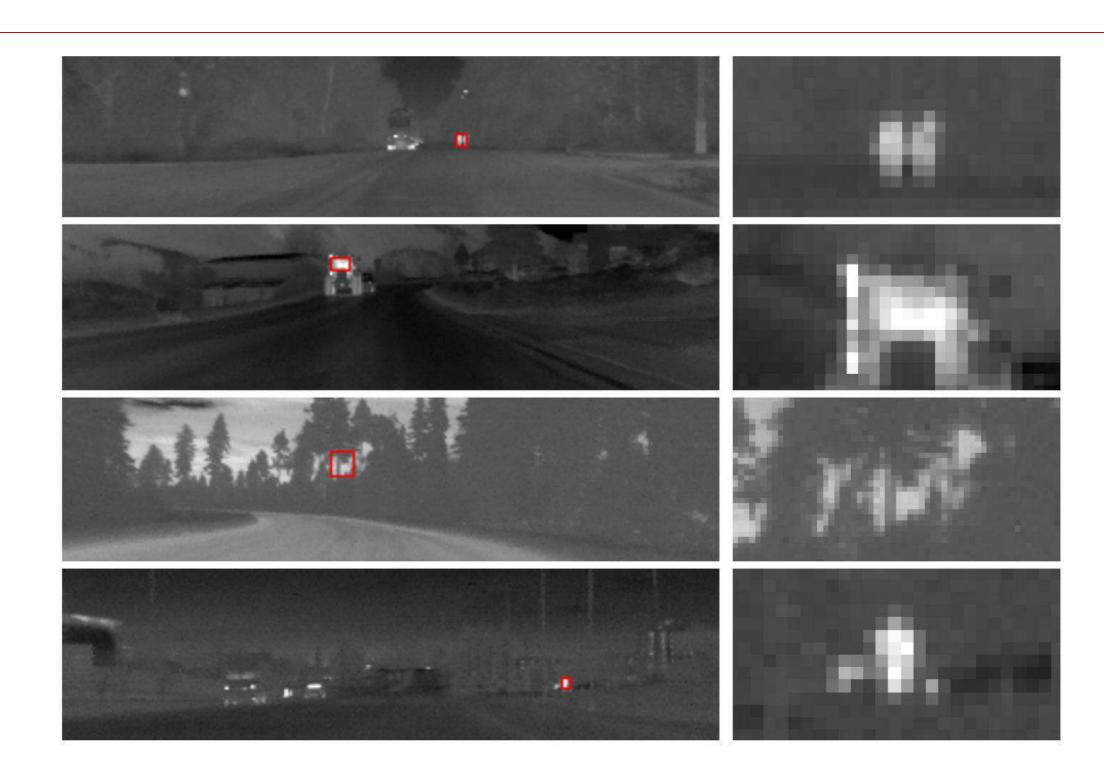


Fig. 5. Example of false animal detections. The left part shows a cut out of the FIR image with the false detection marked in red. To the right of each image is a close-up of the corresponding false detection.

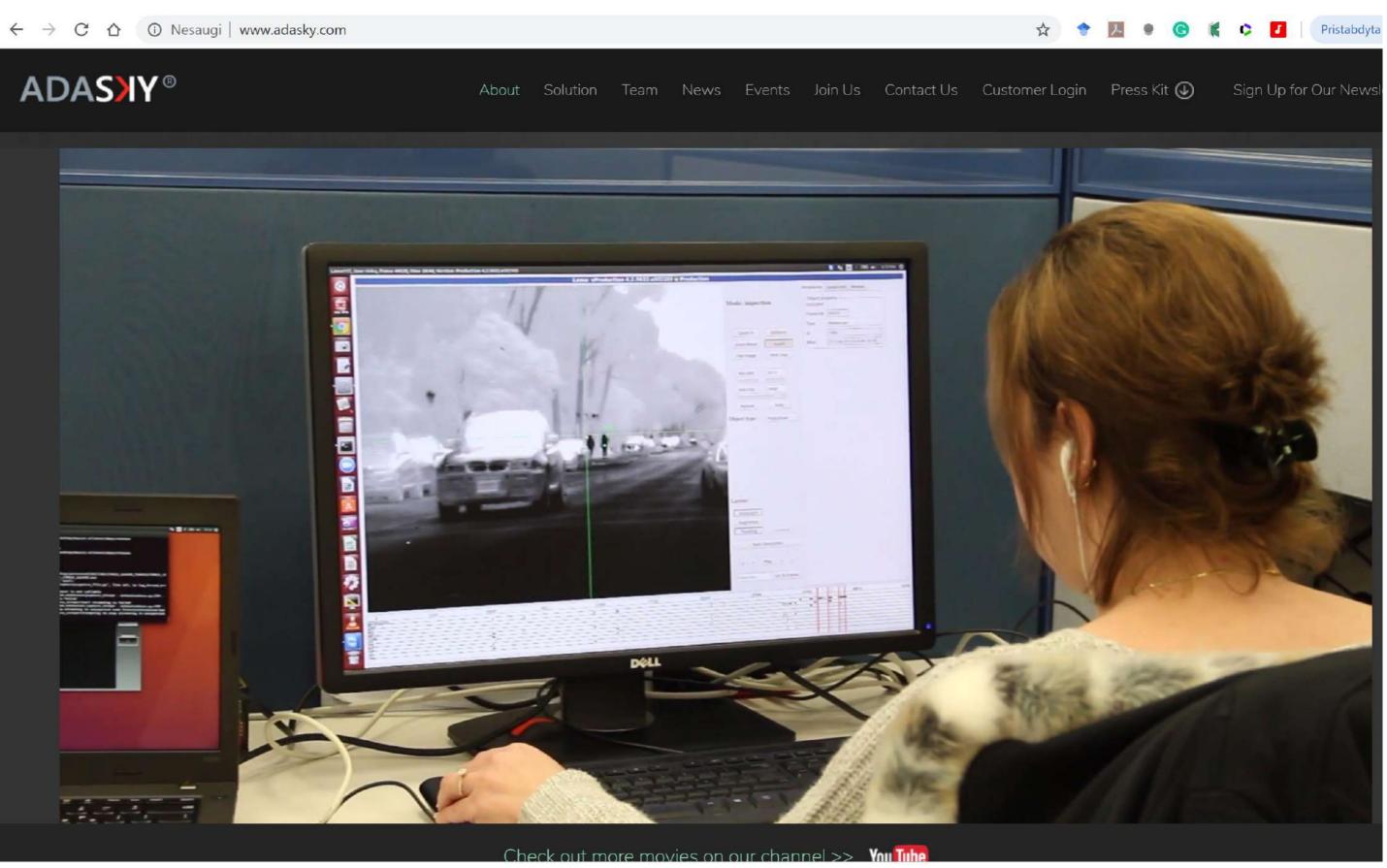






Past projects (11)





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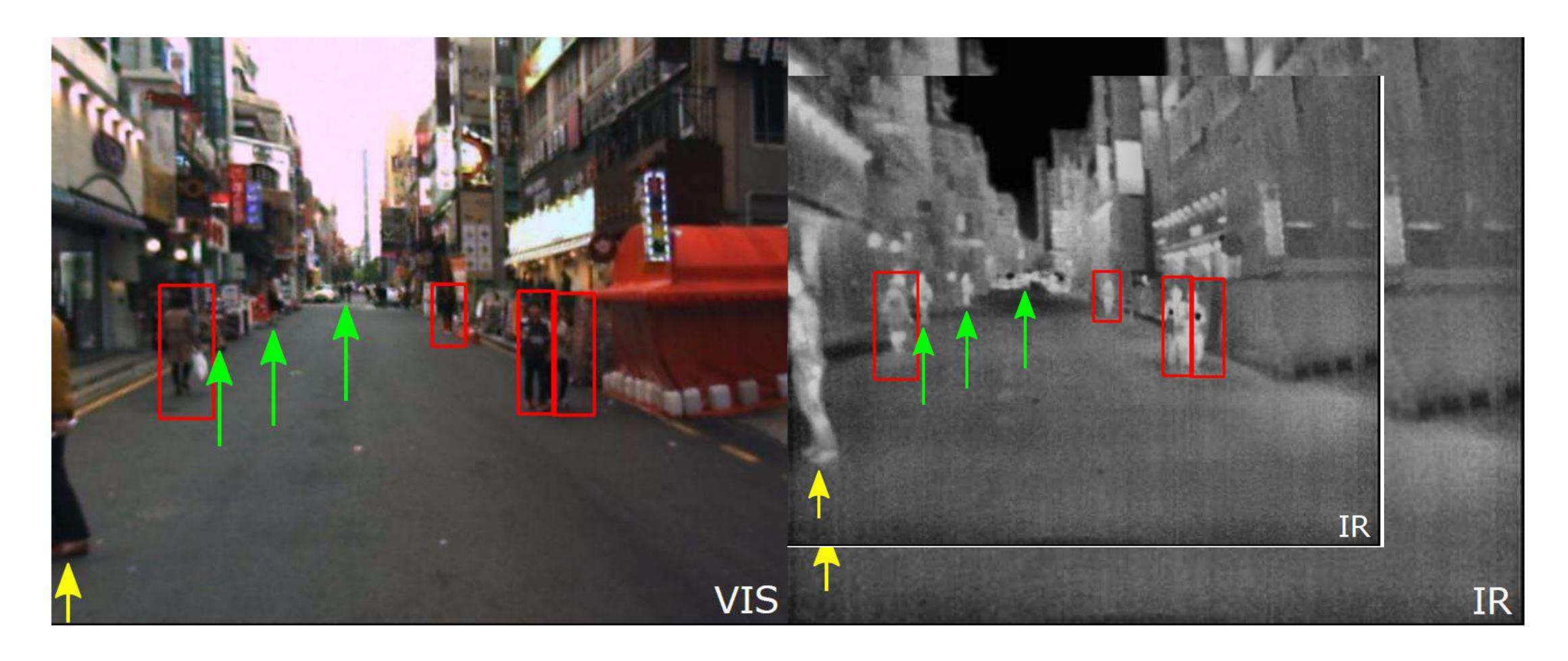








Past projects (12)





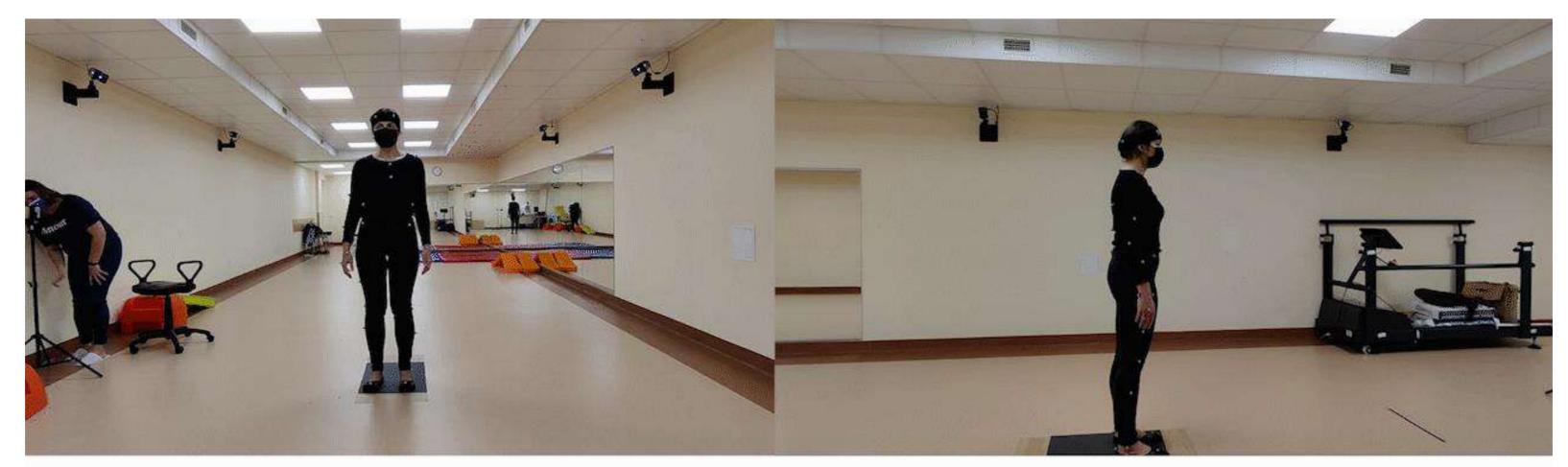








Past projects (13)





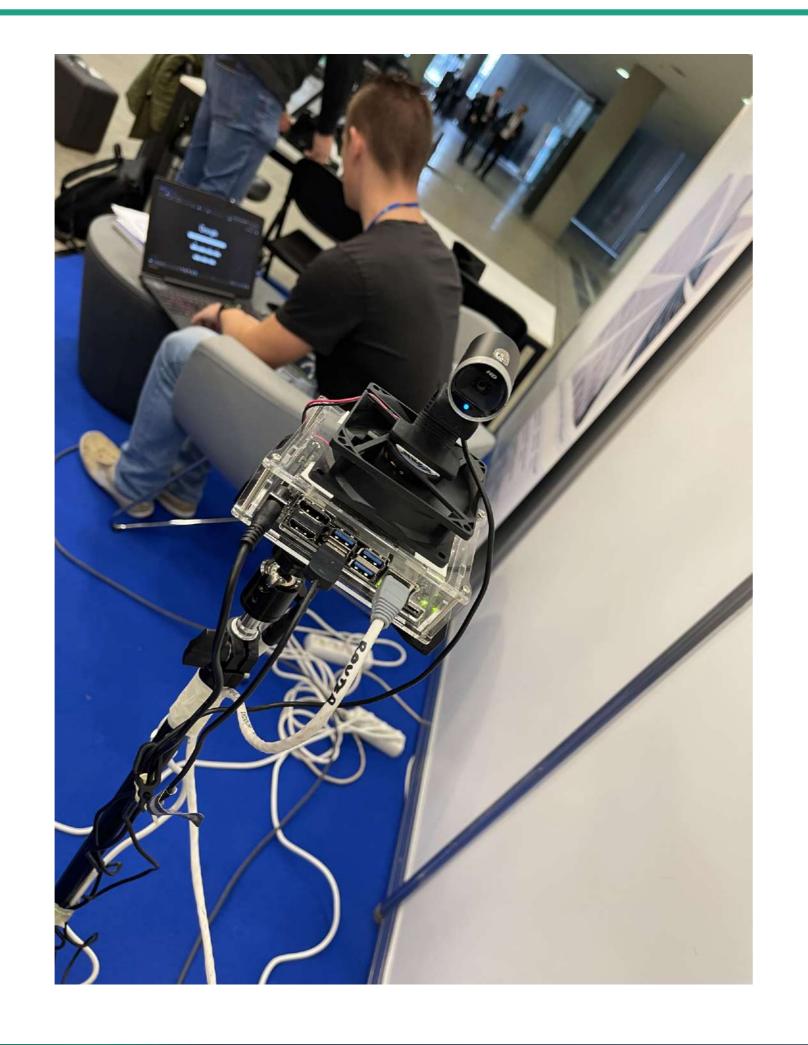


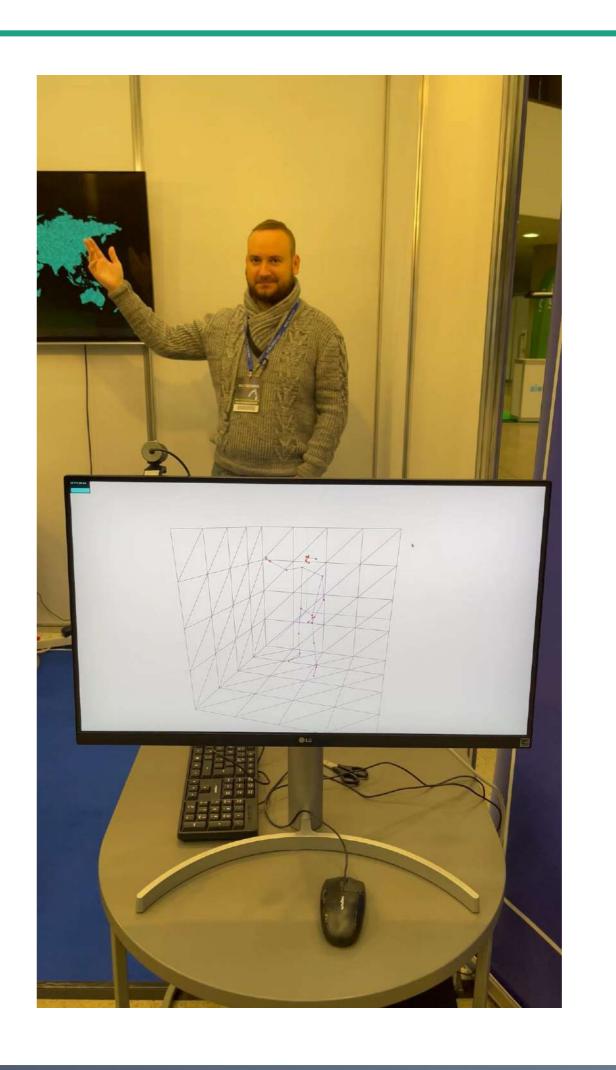






Past projects (14)





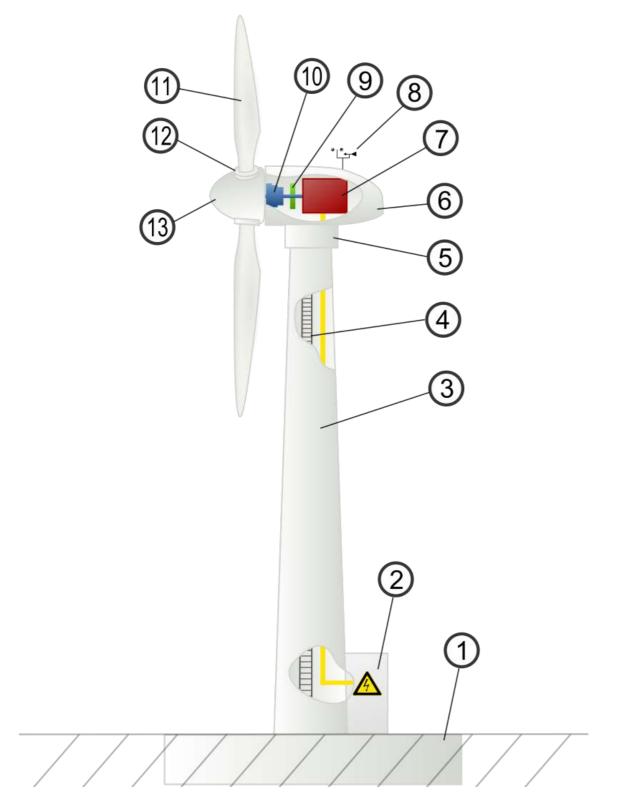


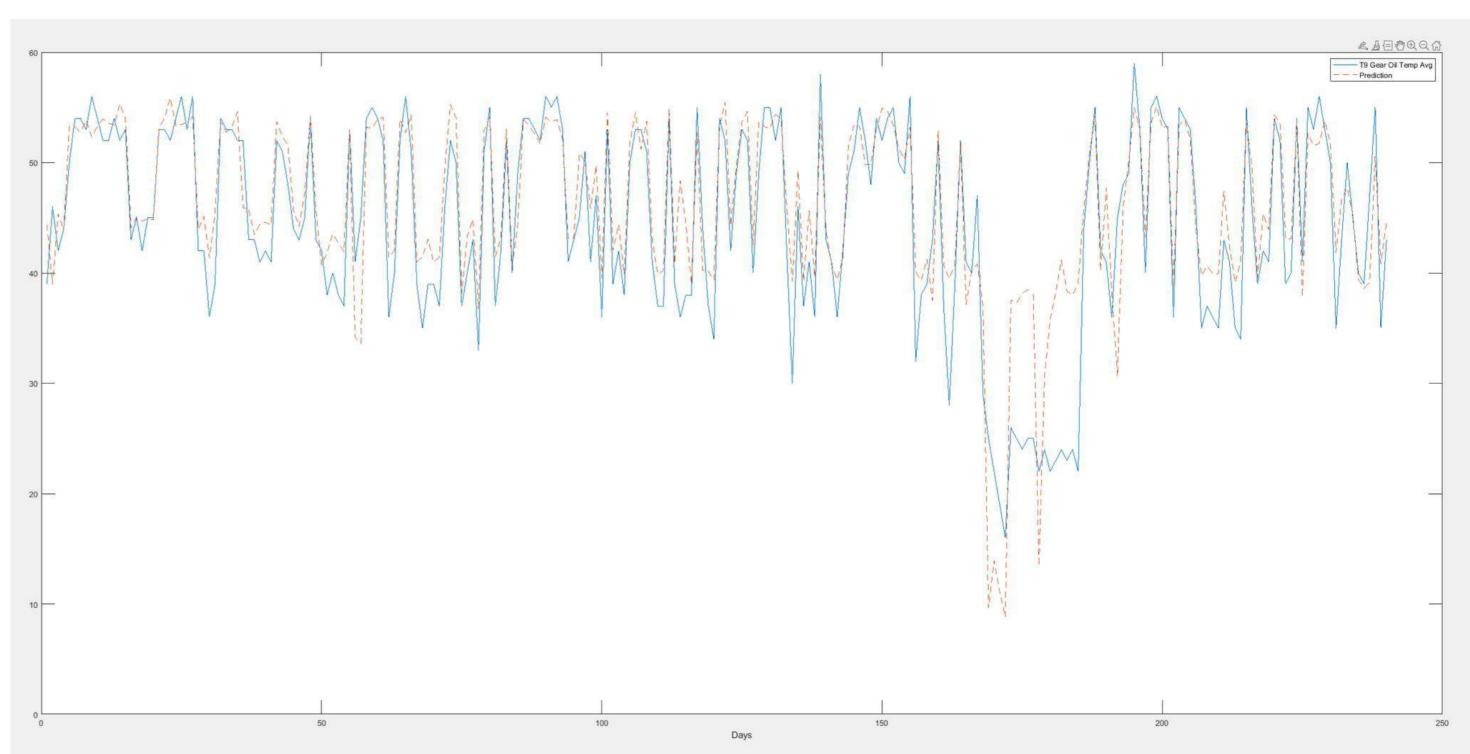






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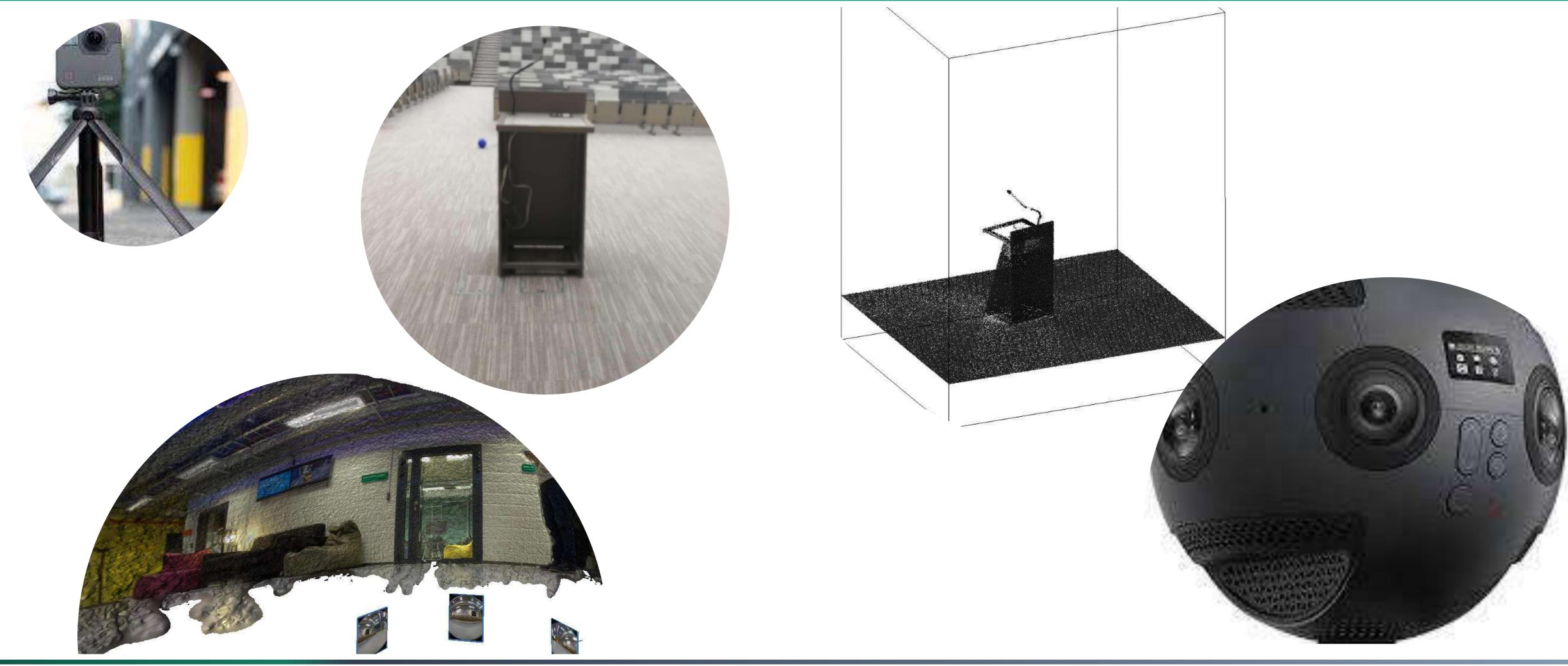








Past projects (16)



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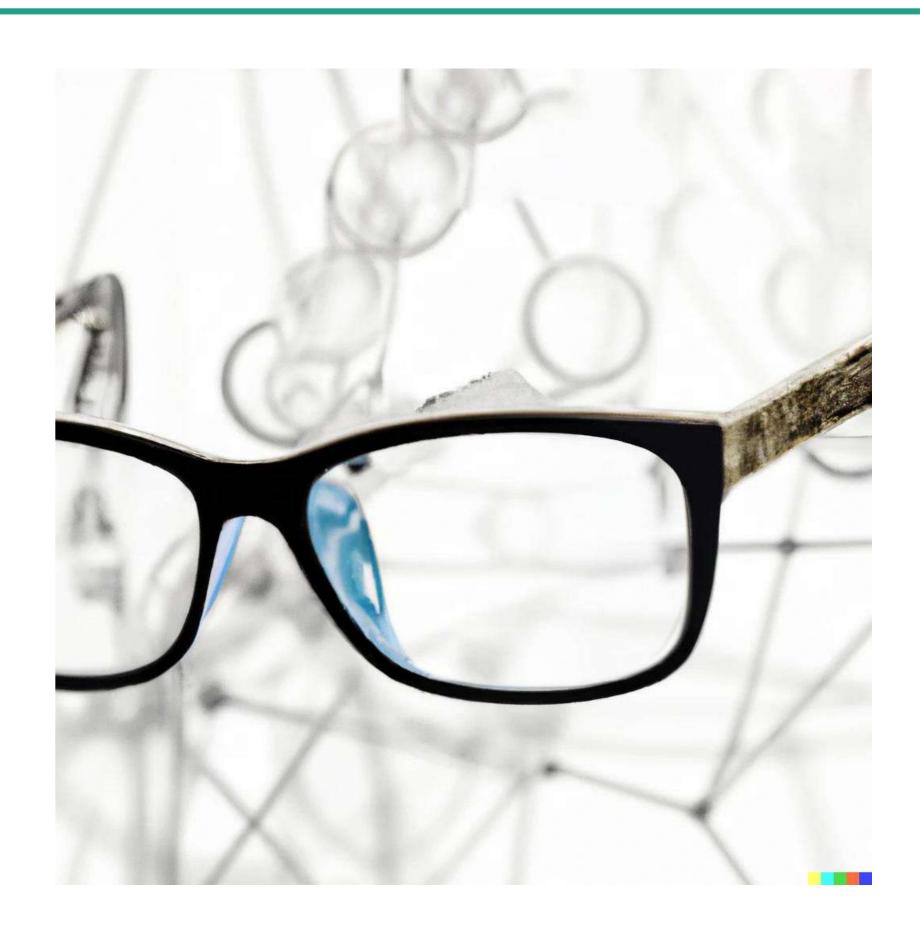




What is Virtual Try-On?

Technology that allows users to virtually test how products look on them, typically using AR (Augmented Reality).





https://glassesclub.eu/









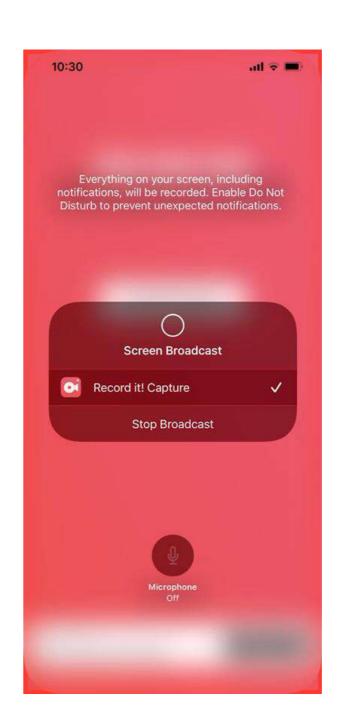


Al in Virtual Try-On: How Does it Work?

- 1. Facial recognition detects key features.
- 2. Al predicts fit based on product dimensions and facial structure.
- 3. AR overlays the product on the user's live feed.















Beyond Eyewear: clothing, makeup, etc.

- Hexa: Hexa is an Israeli startup that focuses on creating realistic virtual try-on experiences. They have developed AI-powered technology that enables users to try on clothing virtually.
- Modiface (L'Oréal): Modiface, a company acquired by L'Oréal, specializes in Al-powered virtual makeup try-on. They provide advanced augmented reality (AR) simulations of different makeup shades, allowing customers to virtually try on various cosmetic products.
- Zeekit (acquired by Walmart): Zeekit is a virtual clothing try-on startup that aims to reduce returns by allowing online shoppers to see how clothing would look on their own bodies. Walmart has acquired Zeekit to offer customers the ability to virtually try on items from various brands.
- Fitle: Fitle offers virtual fitting solutions for fashion retailers. Their Al-powered technology analyzes body measurements and creates virtual avatars to allow customers to see how clothing would fit on their own body shape.
- Ditto: Ditto provides virtual try-on solutions for eyewear retailers. Their AI technology allows customers to virtually try on different glasses and see how they look from different angles, helping them choose the right pair.







Virtual Try-On: Benefits

Benefits to consumers

- 1. Convenience of trying from home.
- 2. Wide variety of options without physical inventory.
- 3. Personalized recommendations using Al.

Benefits to Retailers

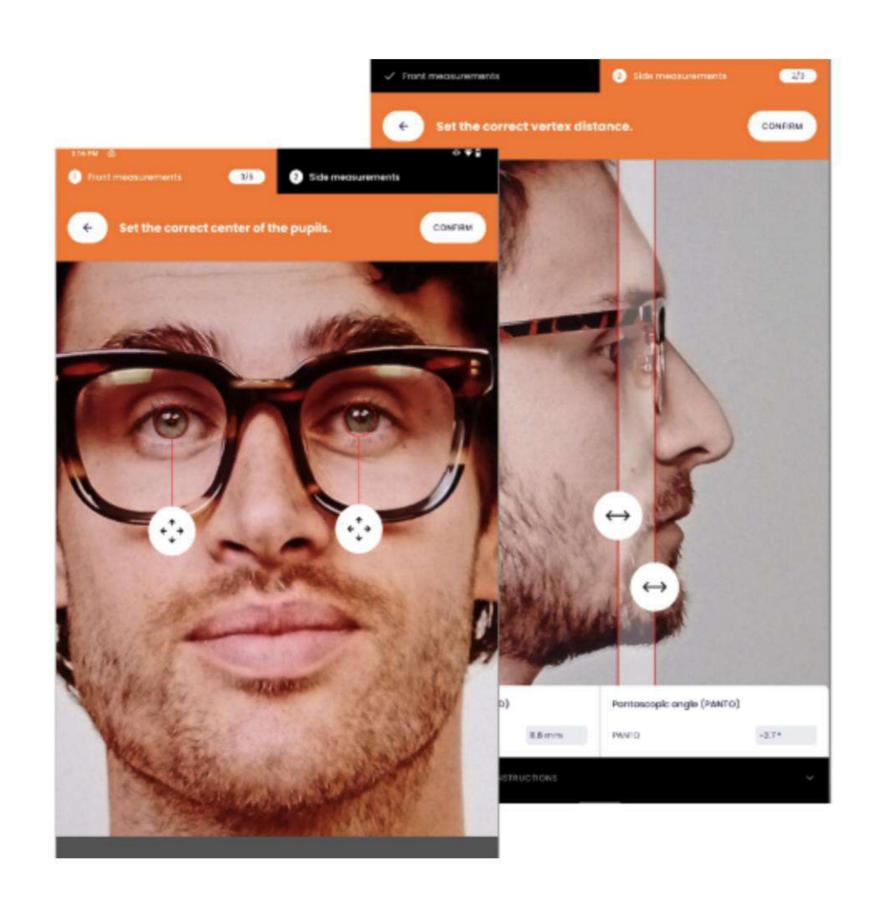
- 1. Reduced need for display inventory.
- 2. Data collection on user preferences.
- 3. Enhanced online shopping experience.

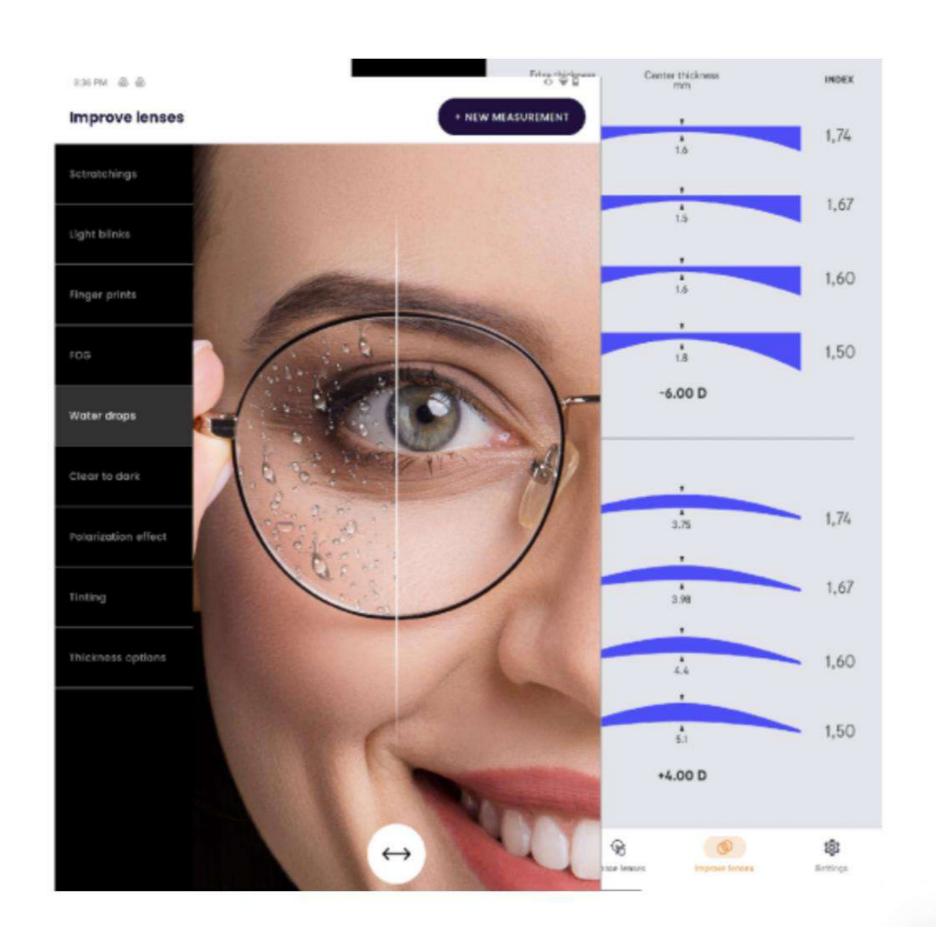






Our story

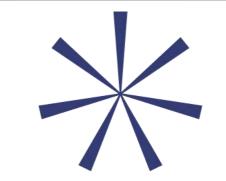




https://www.oculfit.com/

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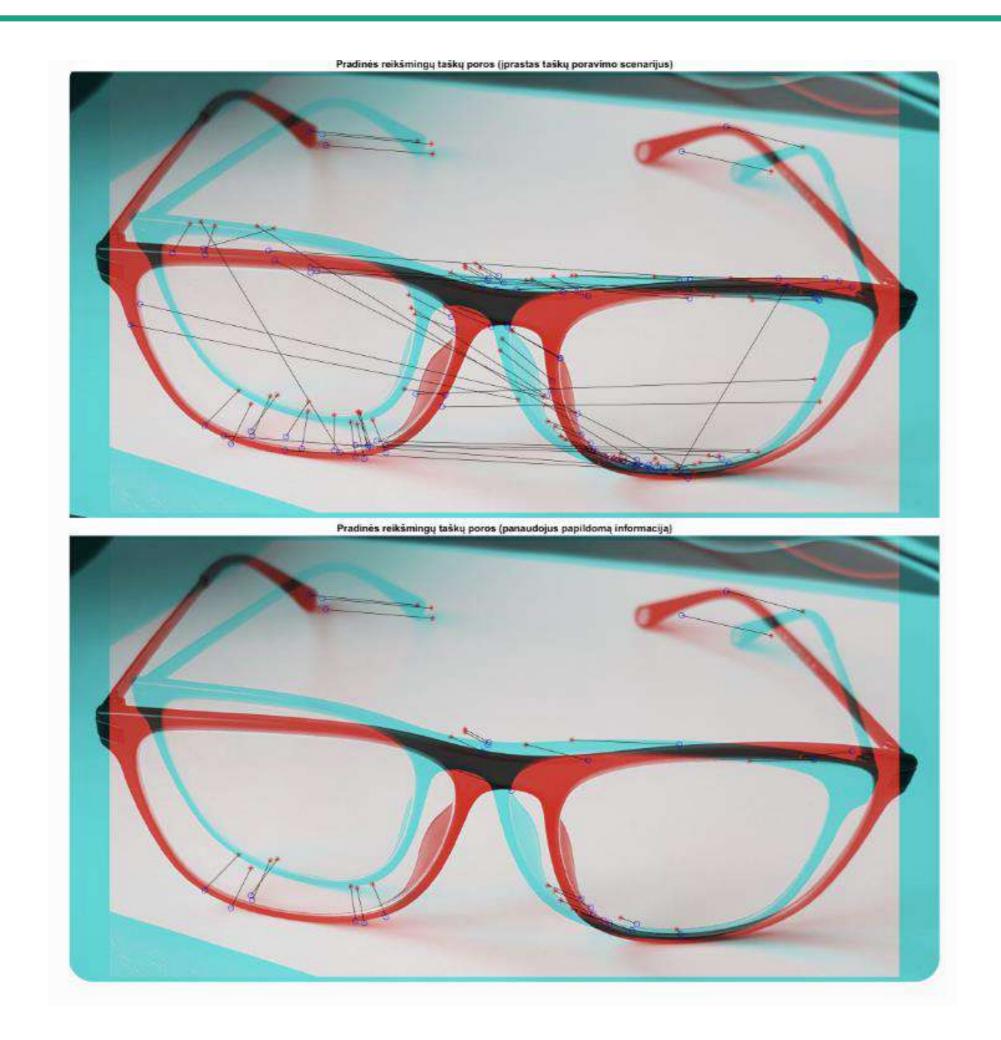
Our story (2)







Our story (3)

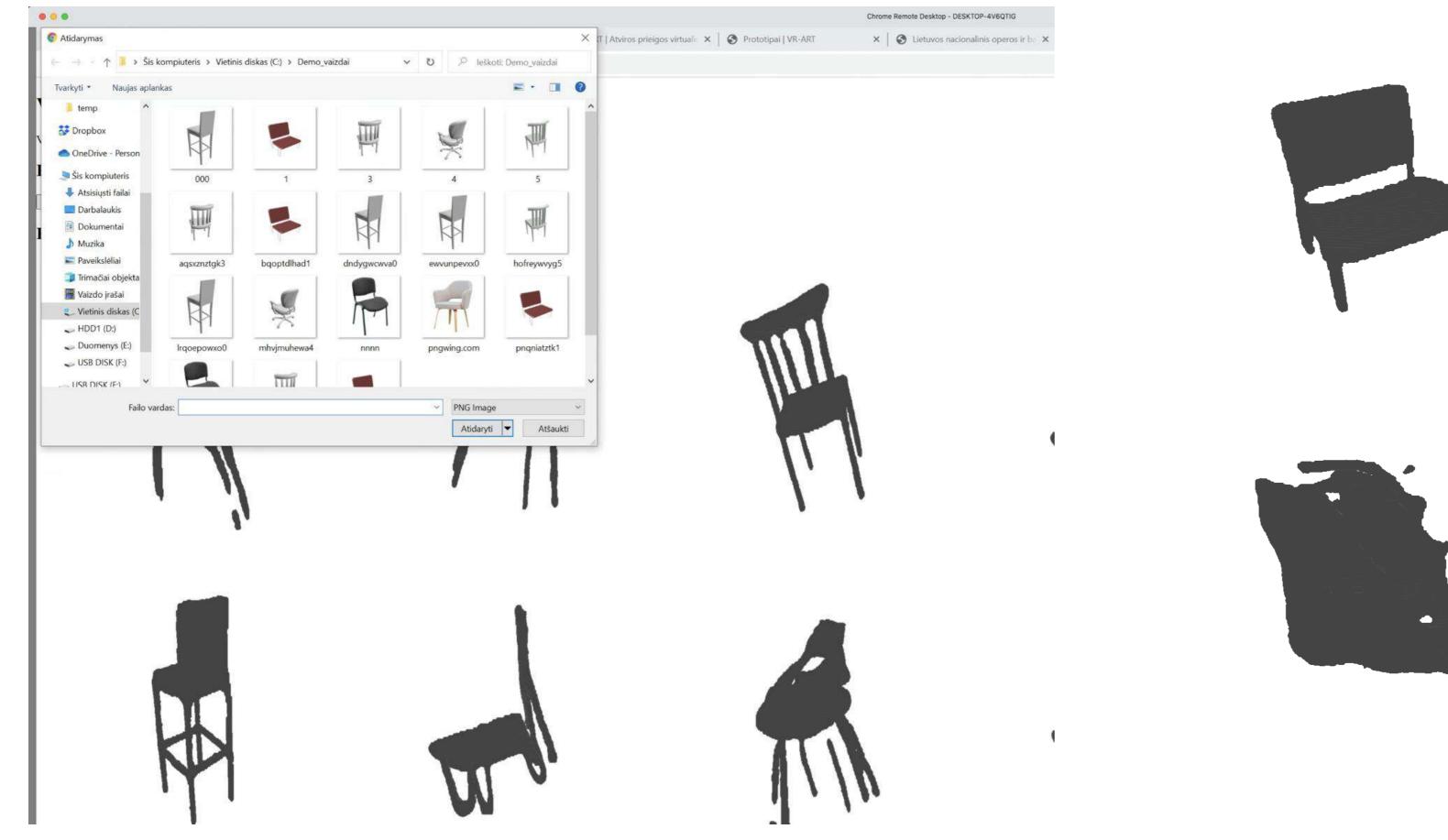








Our story (4)











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Our story (5)



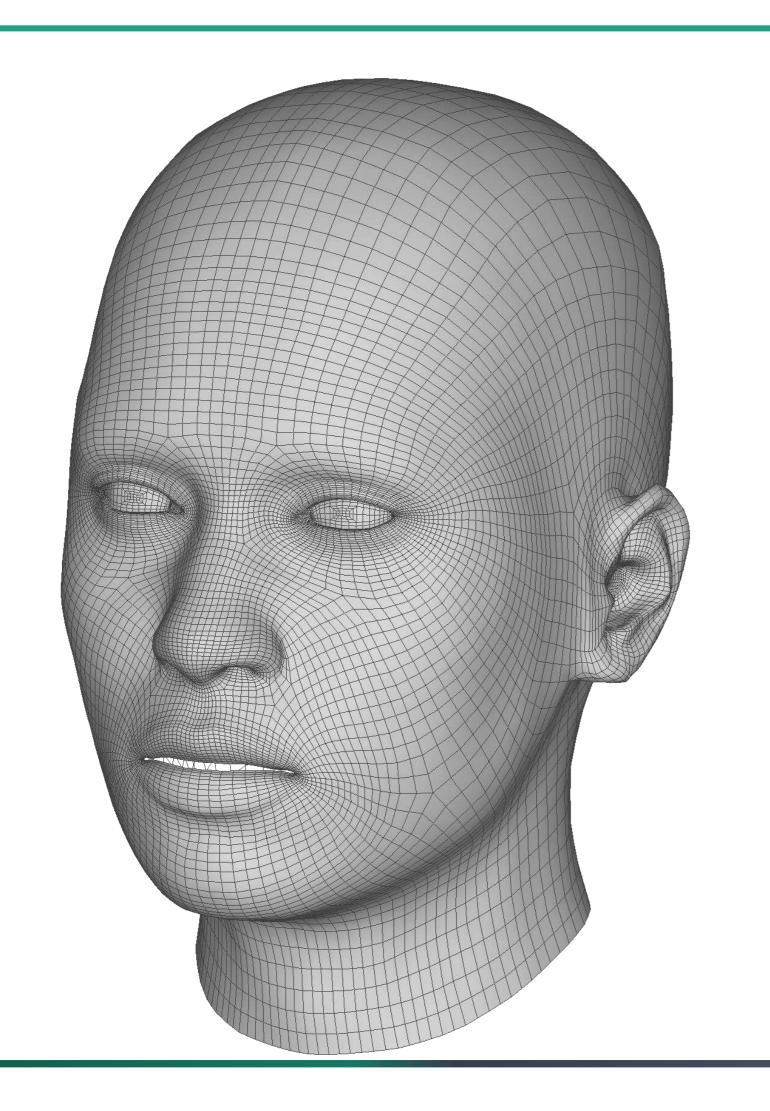


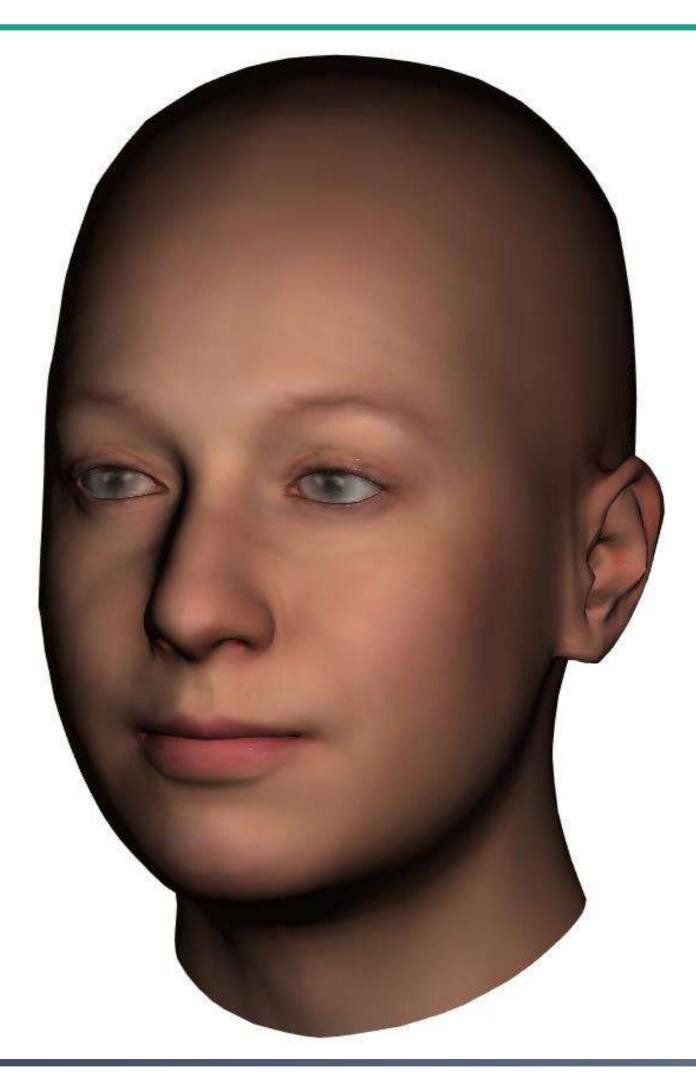






Our story (6)





www.4dface.io/4dfm

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Our story (7)













Our story (8)



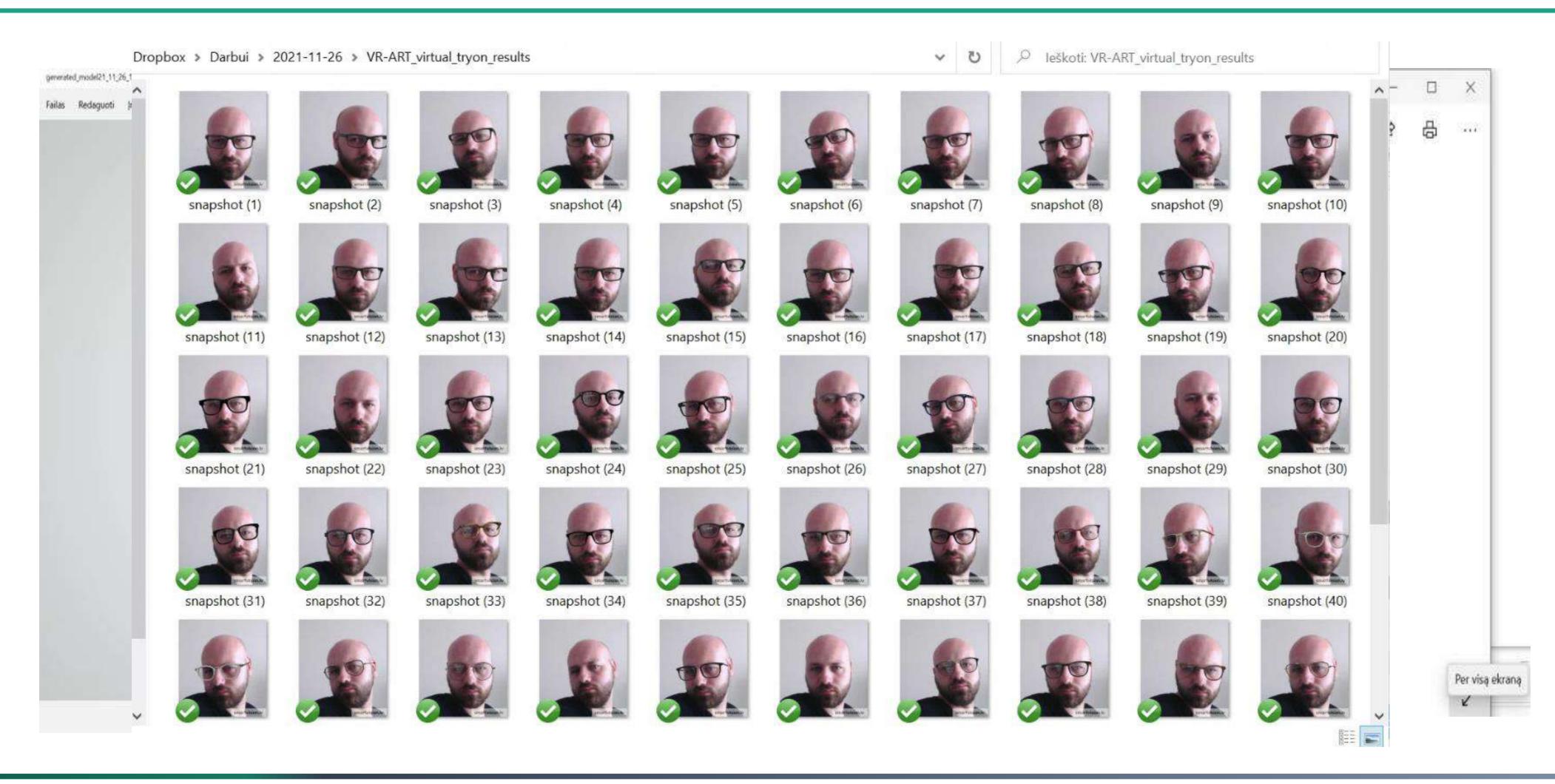






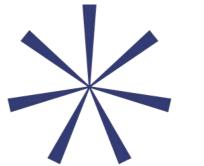


Our story (9)





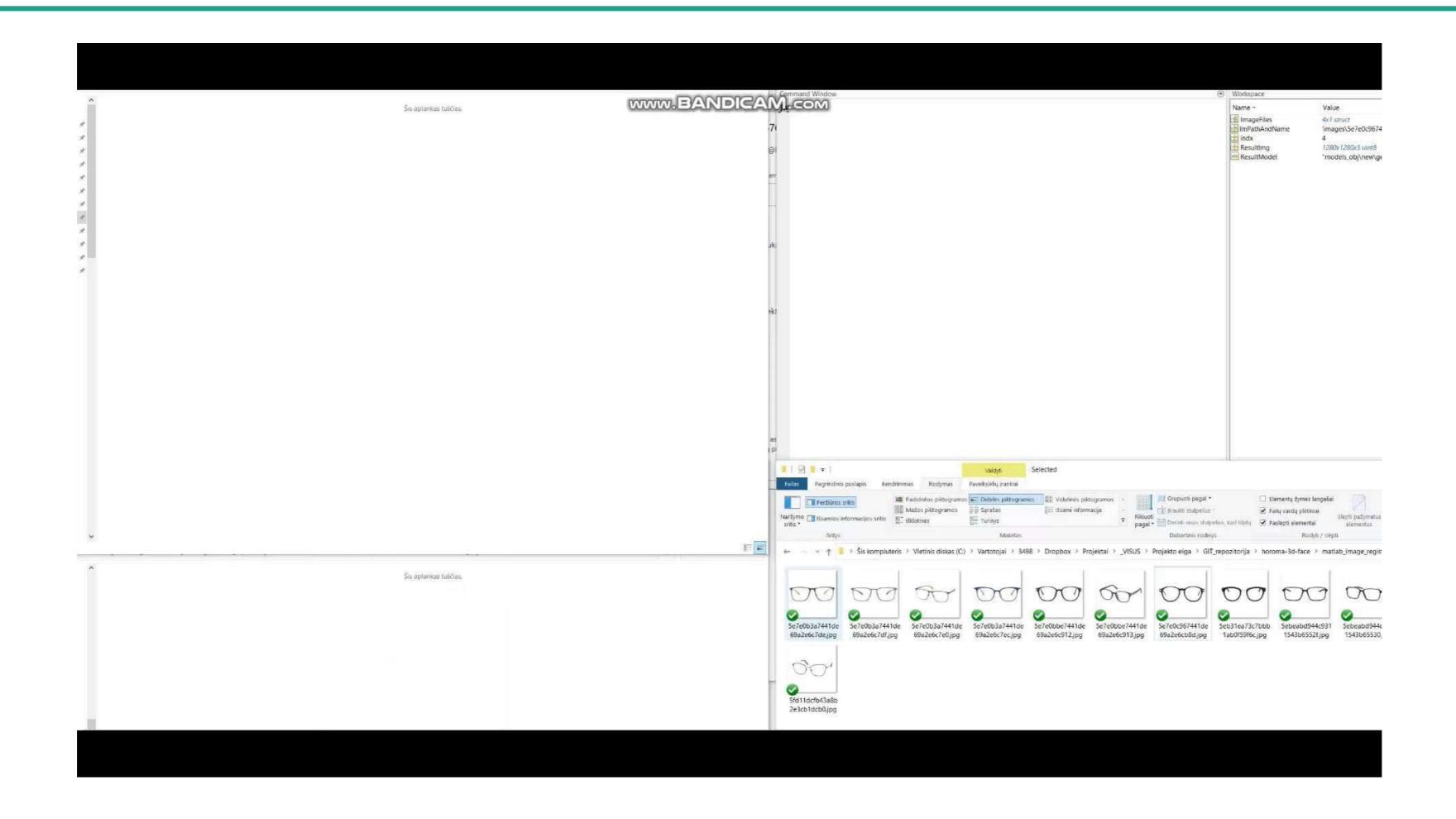








Our story (10)



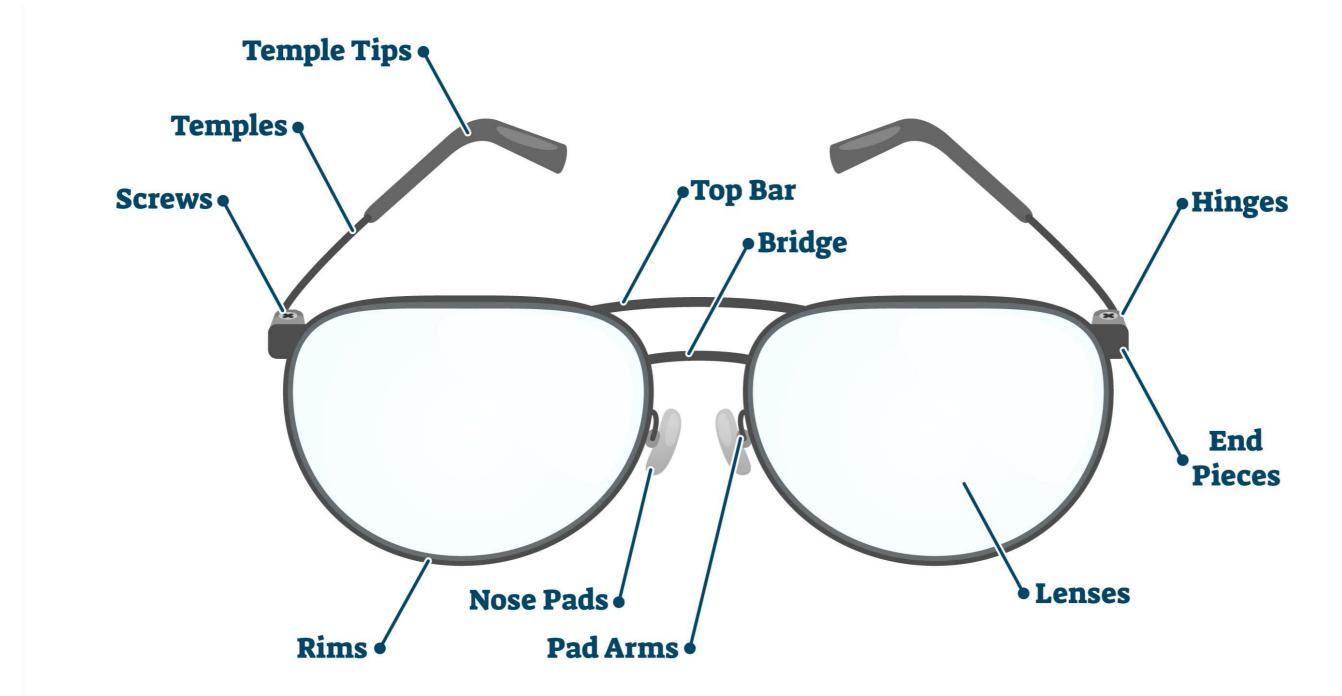




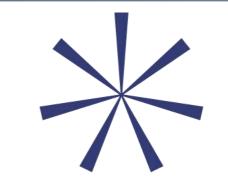


Future Outlook

- More accurate and diverse product visualization.
- Integration into more retail sectors.
- Improved personalized shopping experiences using Al.











Thank you for your attention. Let's discuss!



