

eVolve - TV for seniors



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Who We Are

1. Lucea is an early-stage vision research company based in Slovenia. Driving force behind our R&D team is prof.dr. Matija Marolt and our work is done in close collaboration with Laboratory for Computer Graphics and Multimedia at University of Ljubljana.
2. In the past decade our team have been responsible for innovations for the visually impaired that include the tactile displays, city navigation, and first technology to modify TV images on the fly for both visually impaired and blind with as little as 1% remaining vision [TV for visually impaired](#)
3. We are currently in process of patenting technology eVolve that is uniquely suited to help seniors see better, sharper, and more contrasted TV images. eVolve can protect the sight by eliminating defocus particles from images.
4. We have already developed the core algorithms and technology demonstrator platform **eVolve** ([demo](#)) to date.
5. The effect was already demonstrated and tested on a cohort of users 100 strong.

Project idea

Problem:

Defocused images on TV present a problem for our sight, evolutionary trained to put in focus everything we observe. The most common problem caused by defocusing is eye-straining. With seniors especially those with vision problems (80%), repeated eye strain can lead to various vision problems that may become permanent ([source](#)). Technology is needed to be able to "cure" TV images from microscopic aberrations that are polluting your field of vision. It will work like prescription glasses for the TV.

Our solution for defocused and low contrast TV - eVolve

- TV images appear as if resolution is 50% better, images appear clearer, sharper, and easier to focus allowing the viewer to see before unseen details, colors, contrasts, and depth
- It will maximize the capabilities of your sight regain natural sharpness and contrast allowing the viewer to sit 2 times further from the screen for the same image quality and even in some cases watch comfortably without prescription glasses
- Eye soothing technology safeguards your eyes and reduces eye strain and discomfort by removing the anomalies that trigger accommodation and focusing reflexes that can damage your sight.

Looking for

For past two years, our work was completely self-funded. In this time we have finished research, developed the core algorithms, completed testing and developed fully operational technology demonstrator. But, the current platform is not affordable enough. Funding will allow us to transfer our existing eVolve technology to a more affordable platform, that could be integrated into future TV sets or STBs.

Need Funding

- 80.000€ Completing the scalable Lucea technology platform
- 50.000 € Operating expenses such as further testing, research, sales, marketing, and personnel

Looking for Research & testing partners:

Optometry or ophthalmology clinical departments
retirement homes, hotels, hospitals

Looking for industrial or strategic partners with connections in Broadband/Broadcasting: