



DigiEduHack Solution
Eskişehir - digieduhackAnadolu
Challenge: Eskişehir -
digieduhackAnadolu Challenge 2020

ArFoF: The Art and Design University of the Future

Art and Design of the Future

An Art and Design University featuring advanced AI and VR technology which allows its users to explore different worlds while creating.

Team: Team 1

Team members

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Members roles and background

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Solution Details

Solution description

Our solution is presented in the form of a physical establishment which features advanced AI and VR technology which, also, exists as servers and is available for access even from distance. The solution is in demand by universities, as well as other art and design establishments and academies, since all of them are all aware of the impact of technology and the fast development of the sector. The ArFoF provides a way to keep up with this evolution of art and design as we know it and its success is obvious in all the creative solutions and worlds that can be realized within it. It benefits the users' imagination and creativity and allows them to explore themselves and what they can do without the limits of tradition.

Our final product consists of the following:

- A redesigned education system for Art and Design universities and academies
- A physical establishment for students to get together and develop social environments while exploring new technologies
- A state of the art technology always at disposal for the students of the university
- Online servers provide seamless education and an opportunity to access education from a distance
- Artificial intelligence that fills up the position of mentors when they are not available for 24/7 access without interruption
- An AI system in place which analyses the progress and needs of every individual student, resulting in the best possible guidance
- A place and a system to explore creativity without limitations
- Students of design will be able to experience their products in VR and form connections, full access to their designs in VR, ability to explore and try different ideas and directions and immediately see their impact
- Students studying sculpture will be able to put on impact gloves and be guided by their mentors from afar, who will also have gloves and be able to assist them.
- Students studying painting will be able to paint in VR and step inside their creations, as well as be guided through gloves with the help of professionals
- Students of film will be able to realize their projects in studios which can create any environment needed and the actors will be provided with motion capture using robots or holograms, which solves the problem of not being able to find an actor. AI and machines will be able to assist as crew members.
- Acting students will be able to practice their lines with AI and participate in different scenarios in VR simulating movies.
- A pocket assistant in form of a hologram, which will notify students of any upcoming activities, changes, test dates, and everything going around the campus. It will also feature a point system for participation, extra assignments, or volunteer work is done in and off-campus. Students collecting points will be able to join conferences or workshops which would normally be paid for, for free or purchase different looks for their holograms and avatars.

- Students will be able to join classes, conferences or any form of activity through VR sets, wherever they are based, and participate either through VR or through their pocket assistants in form of holograms.
- Classrooms featuring the latest technology, progress analysis, virtual assistants, tailored as ateliers for corresponding courses.
- A wide range of workshops and activities, which students will be able to access from distance as well, thus creating opportunities constantly that could otherwise be missed. These workshops will also feature knowledge about technologies used and study how to maximize the outcome of its usage.

We wish we have had more time to develop some of the courses and the system of our university, but we feel strongly that this is a good beginning and a great step towards discovering the full potential of technology at hand.

The introduction video can be found here: <https://vimeo.com/481654304>

Solution context

The expansion of the design community and design fields, as well as breakthrough innovations around machine intelligence, the use of AI and VR, are all changing at a fast pace. However, the possibilities available to designers have not been able to keep pace. Unless we provide them with an area, both digital and physical, and allow them to accept this change and experiment, their careers and future may come to a stop. By enabling AI professors which can assist students from wherever they are, the technology, and a welcoming environment, we believe progress can be made and the future can be embraced. We strongly believe that smart and seamless learning stems from the efficient use of technology and explorations of the above. Our system, if put in place, would connect the farthest points creators are at right now and connect them. Education accessible everywhere would uncover potential, provide information, and offer a limitless range of possibilities. These students would be guided to achieve progress, maximize their abilities, and apply them to the real world, which they are sadly unable to do now.

Solution target group

The target groups are online design and art educational institutions and private educational organizations, which will be able to improve their systems by upgrading them to fit the future goals and needs of students. In addition, all art and design establishments, not excluding visitors, will be able to benefit from advanced educational systems that will fruit design solutions for ongoing and future issues.

Solution impact

The quality of education and the future of design will massively improve, allowing for further developments of technology and an increase in productivity. With this system implemented, designers and artists will be able to research a high number of alternative directions and impose their creativity without limits. This gives them new creative freedom, enables them to interact with design products and visit environments in which they will exist. Lifting the sensation of being in the real world is a strong point while keeping the environment natural and ergonomic existing laws which limit creation will be dismantled and the user will be left free. It will also allow for a democratization of machine learning and use and ensure availability within the general art and

design community. I think that the impact is almost hard to measure or predict, since the developments that could branch out are limitless. The creativity of the human mind is, we believe, a power to be reckoned with, and with the right tools we can watch in awe as new forms, new designs and incredible art starts pouring out.

Solution tweet text

Meet ArFoF, AR for Future, Art for Future. Explore possibilities, challenge your limits, from anywhere, any time.

Solution innovativeness

The innovativeness of the project lies in the extent to which the project will be realized. So far we have seen universities use AR, but at a very low capacity and in underdeveloped conditions. At the moment, there is nothing coming close to the amount of accessibility our university would provide being both offline and online. Moreover, future-oriented programs are lacking in these disciplines. Universities like Tufts and Cornell offer courses in which you can learn about AR, VR, and MR, however, their disadvantage is the deficit of hands-on approach and as a result, these technologies remain taught and learned as theory, abstract, and out of reach. The democratization, increasing availability, teaching through doing, and bringing it home pushes both the industry and the education to accelerate development and, as result create design solutions that take us to a new future of ours. Lastly, the use of AI to catch details, analyze progress, and adjust towards our needs opens new doors for a system tailored according to everybody's needs.

Solution transferability

The proposed solution can be applied outside of art and design schools for purposes of research in different fields of education. In addition, companies working on innovations can benefit from art and design creations and ideas in order to improve themselves. Moreover, it may induce a rise in the use of these technologies overall, minimize interface issues, interruptions, and distractions, which enlarge the impact this education system can leave on different sectors.

Solution sustainability

In order to execute the solution in short term, we think it is necessary to seek and secure investment from companies developing and producing the equipment needed. In long-term the progress made in art and design universities will be able to speak for itself and enable bigger availability of tools, which will lead to increase in popularity of usage of these technologies. Our main goal is to normalize and implement these tools in design and art to the point where they will be as available as our mobile phones are now.

Solution team work

As a group of friends, we have been able to brainstorm ideas together and improve on them. We have also been able to work together to design our proposed solution and are positive about being able to cooperate in further development and projects together.