



IDC School of Design
अभिकल्प विद्यालय
IIT Bombay

A P3 Report on

Embrace

Animated Short Film



By
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Guided by
Prof. Sumant Rao

Declaration

I declare that this written document represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea, data, fact or source in my submission.

I understand that any violation of the above will be cause for disciplinary action by the institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.



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Approval Sheet

This is to certify that the project report titled “Embrace” by Ankit Saroha Roll no: 22M2208 is approved for partial fulfillment of the requirements of the Master's of Design Degree in Animation Design from IDC School of Design, IIT Bombay.

Project Guide:



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Acknowledgement

I am grateful to Prof. Sumant Rao for his unwavering support and guidance throughout this project, from its inception. Their expertise and encouragement were instrumental. I would also like to thank Prof. Prosenjit Ganguly for his insightful feedback during the stage juries, which significantly improved the project. My sincere gratitude extends to everyone who made this project possible.

Abstract

"Embrace" is a poignant film exploring the emotional impact of hair loss on young people in India. Set in an AI-driven future, it delves into innovative hair restoration technologies and personal journeys, culminating in a surprising twist.

Introduction

"Embrace" is a 3D animated film that explores the emotional impact of hair loss on young people in India, where over 50% of men experiencing hair loss are under 25. Inspired by this issue, the film highlights the emotional and technological aspects of hair restoration in an AI-driven future.

Artificial intelligence (AI) makes machines smart, allowing them to learn, solve problems, and make decisions. This technology includes machine learning, neural networks, and natural language processing. AI is driving innovations in healthcare, finance, and more but also raises concerns about data privacy, bias, and job loss.

In "Embrace," young individuals face the emotional and social challenges of hair loss. Set in a future with advanced AI-powered hair restoration solutions, the characters undergo personal transformations, leading to a surprising twist. Through compelling storytelling and stunning visuals, "Embrace" emphasizes self-acceptance, empathy, and the search for personal identity amid technological progress.

Research

General Intelligence

Artificial general intelligence (AGI) is typically defined as a system that performs at least as well as humans in most or all intellectual tasks. A 2022 survey of AI researchers found that 90% of respondents expected AGI would be achieved within the next 100 years, with half predicting it could happen by 2061. However, some researchers dismiss existential risks from AGI as "science fiction," based on their confidence that AGI will not be developed soon. Recent breakthroughs in large language models have led some researchers to reassess their expectations. Notably, Geoffrey Hinton, in 2023, revised his estimate from "20 to 50 years before we have general-purpose AI" to "20 years or less."

Superintelligence

In contrast with AGI, Nick Bostrom defines superintelligence as "any intellect that greatly exceeds the cognitive performance of humans in virtually all domains of interest," including scientific creativity, strategic planning, and social skills. He argues that superintelligence could outmaneuver humans whenever its goals conflict with ours and might hide its true intentions until humanity is unable to stop it. Bostrom emphasizes that to be safe for humanity, a superintelligence must align with human values and morality. Stephen Hawking supported the idea of superintelligence, arguing that it is physically possible since no physical laws prevent particles from being organized for advanced computations beyond human brain capabilities. Predictions for achieving artificial superintelligence (ASI) are more uncertain than for AGI. However, in 2023, OpenAI leaders suggested that not only AGI but superintelligence might be achieved within less than 10 years.

Personal experience

From my personal experience, a lot changes when someone begins to experience hair loss. It starts with how you perceive yourself and how others look at you. People often find it amusing and make jokes at your expense, which can be hurtful. Some friends start to change, and everyone seems to have advice on what you should do to fix it. Amidst all this, your confidence begins to wane. The younger you are when you face hair loss, the harder it is to accept yourself in this new way.

Visual Development

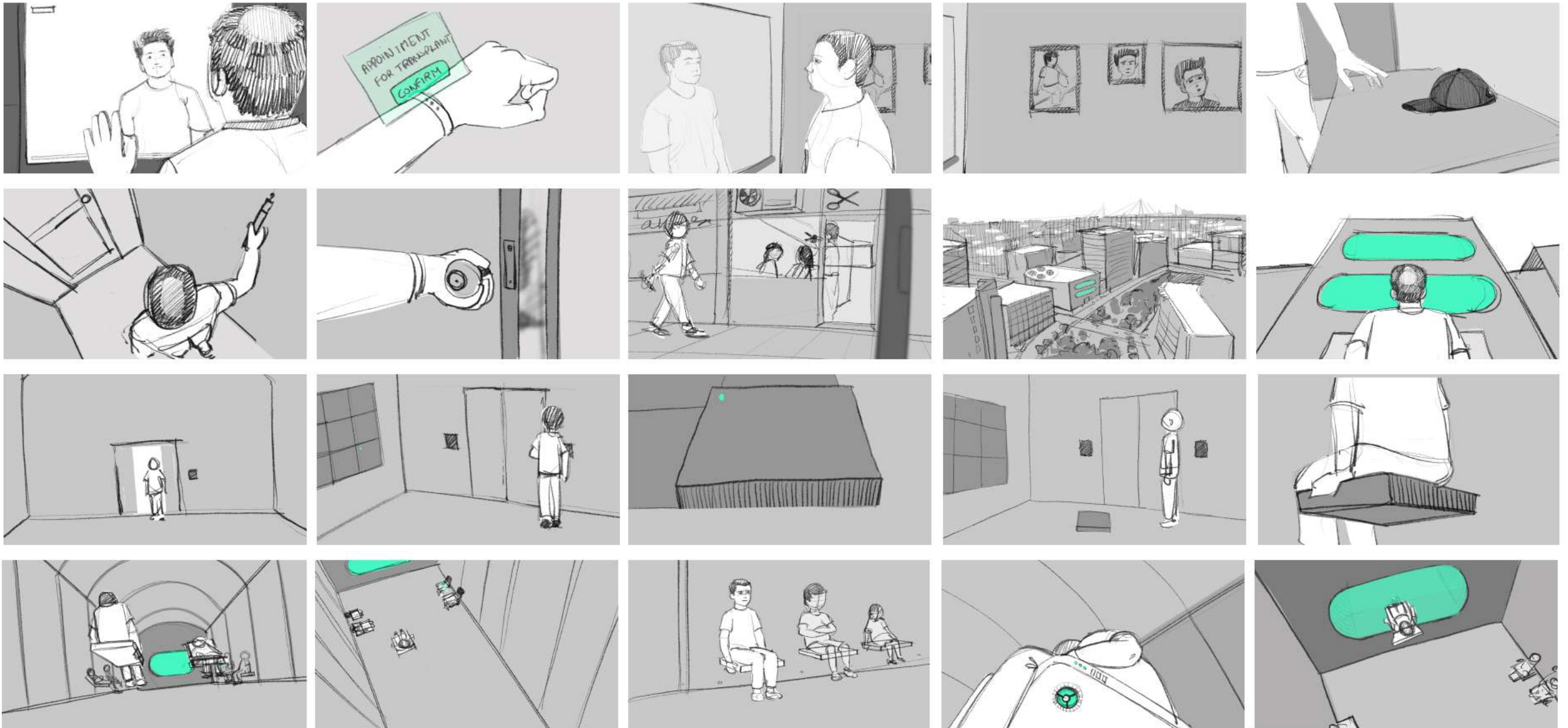
For texturing, I used Substance Painter and Vizcom AI software to add intricate details. I then composed the textures in Photoshop. This workflow turned out really well for me and saved a lot of time.



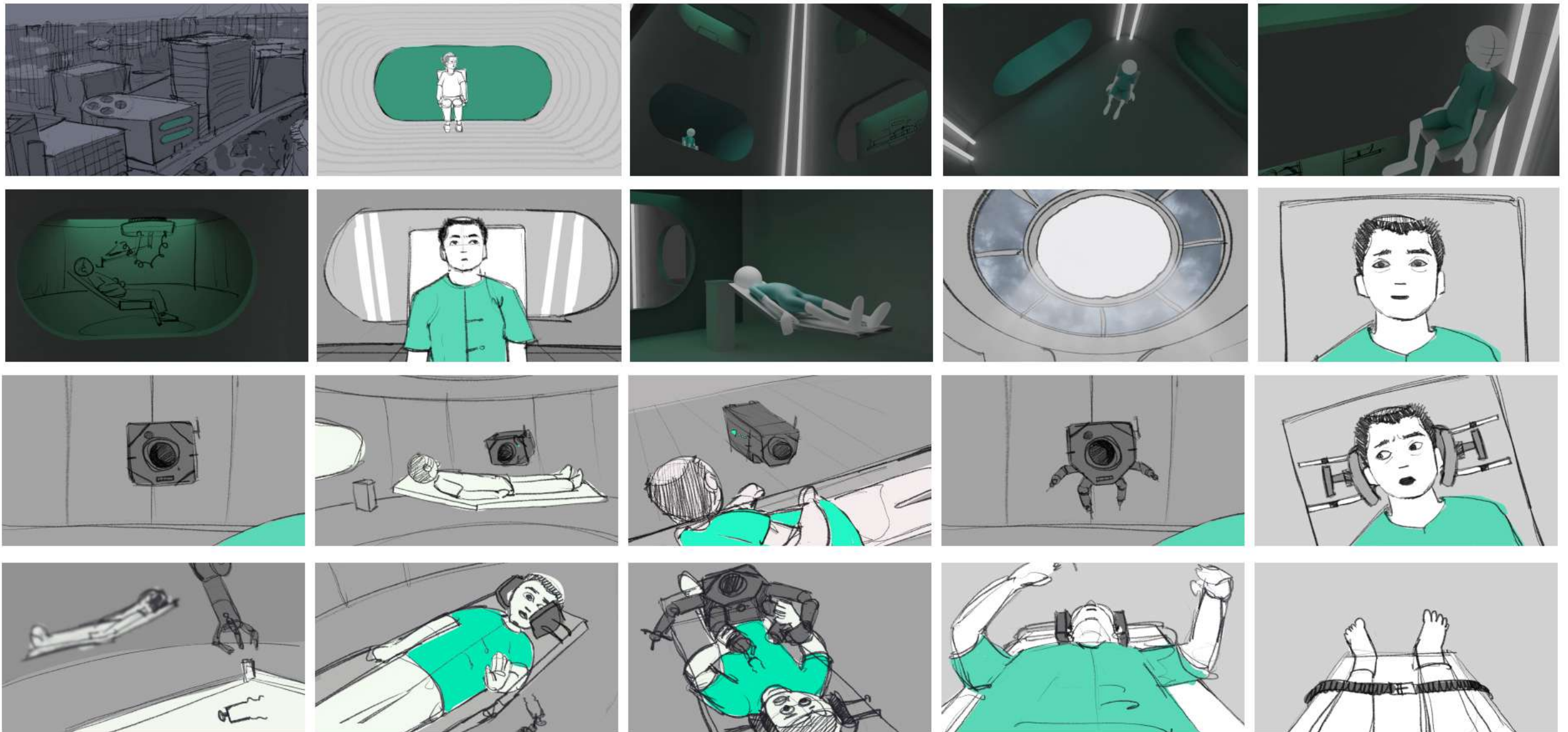
Visual Development



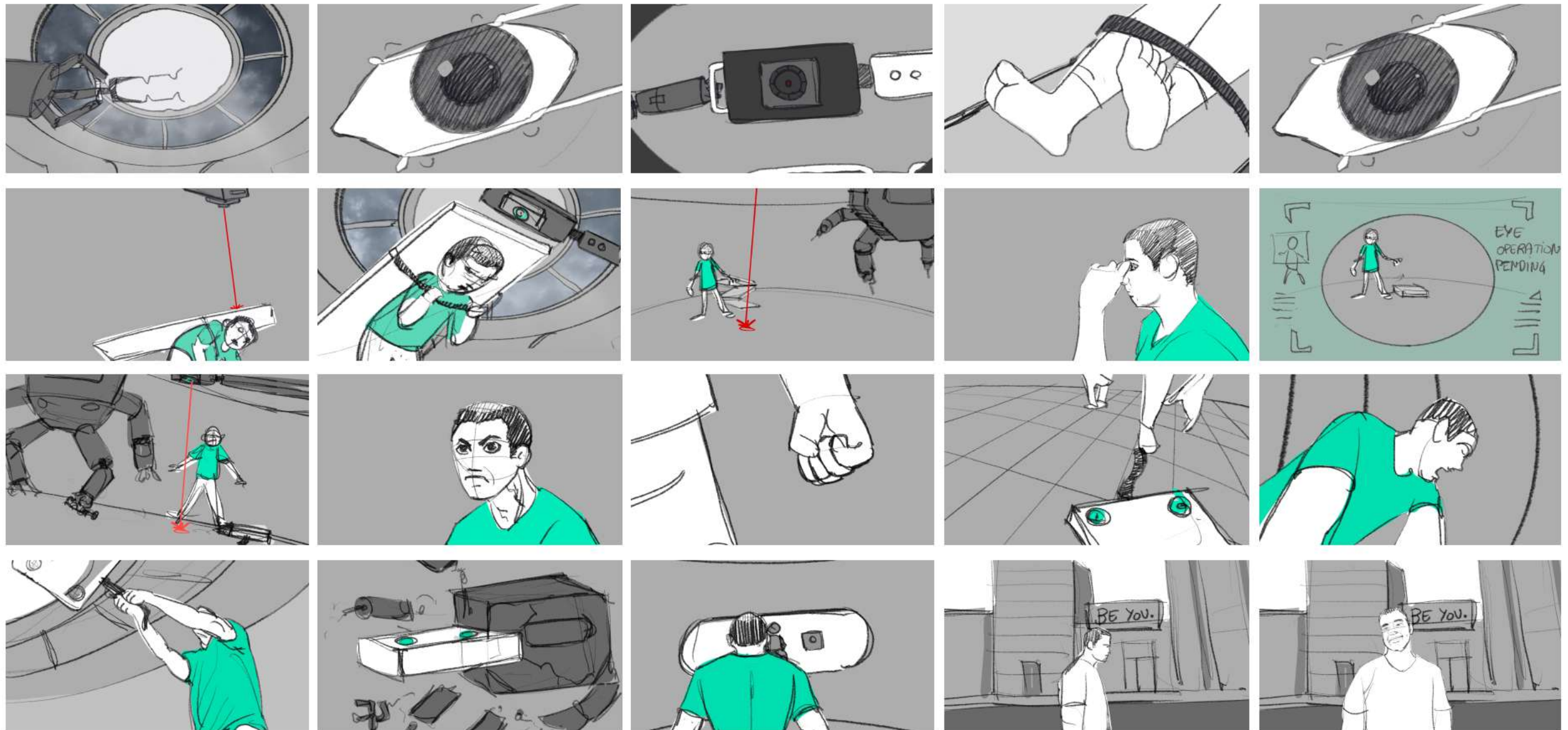
Storyboards



Storyboards



Storyboards



Shots from Film



Shots from Film



Conclusion

In the conclusion of "Embrace," the protagonist, having undergone AI-powered hair restoration, discovers that true transformation is about self-acceptance. While technology offers temporary solutions, the journey highlights the importance of inner worth and empathy.

Creating "Embrace" taught me a lot about 3D animation, from character sculpting in ZBrush to rendering in Blender. The film is not just a display of advanced technology but a story encouraging viewers to embrace their true selves.

The message of "Embrace" is clear: be yourself, as people will always have something to say. In a world that often prioritizes appearance, it's essential to remember that our true value comes from within. The film reminds us that the most significant transformation is accepting who we are.