

The background is a deep black space filled with numerous small, distant stars. A complex, three-dimensional wireframe grid, composed of thin, light-colored lines, is superimposed over the scene, creating a sense of depth and structure. Several celestial bodies are scattered throughout: a large, blue and white planet with dark spots is in the upper right; a smaller, purple and orange planet is below it; a planet with a red and orange surface is in the center; and a small, grey, cratered moon-like sphere is to its right. On the left side, there are several other planets, including one with a blue and white surface and another with a brown and orange surface. A small, blue, ladder-like structure is visible near the bottom left.

Women in the Future Cyberpunk World

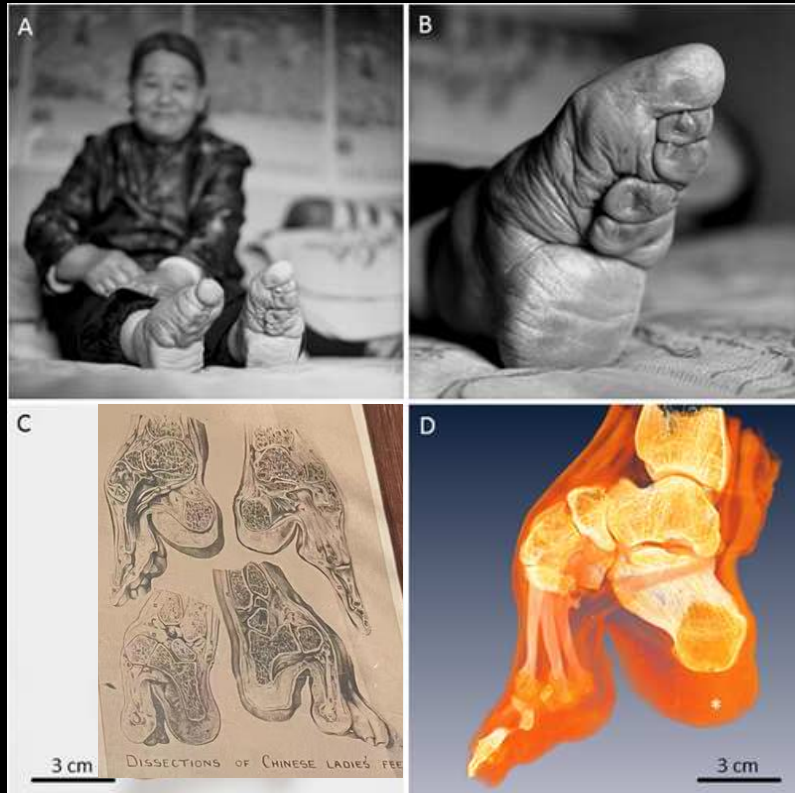
Dystopian cyberpunk characters driven by body modification technology

work by Xiaoxia Chen

Field Research- women are abused past , now ,future? tech make Eve

The modification of women's bodies in the past and present has always reflected the oppression and objectification of women in patriarchal society. Even in a future world where cyberpunk technology is fully developed, there are still expressions of sexual objectification of female characters, as if technology has become a means of manipulation for the patriarchal society to transform women.

Women In 1800s China



Anatomy pictures of foot binding.



Foot-binding is a kind of body modification of women in China in the 19th century. It is a product of traditional patriarchal cultural disciplines. By wrapping girls' feet during the growth and development stage to form "little feet" that are unable to walk healthily to satisfy the patriarchal confinement of women - a kind of body modification that cruelly oppresses women. — Photographed at Oxford University Museum of Natural History in field research.

Cyberpunk art of women In Future world



Nowadays, the creation and description of women in the cyberpunk world are also full of sex fantasy, objectification, and patriarchal oppression. It's rare to see an ugly cyberfuture female protagonist

Female characters in the cyberpunk world

Cyberpunk film and television works and popular creations are also full of erotic expression and "instrumentalization". In the conceptual context of the future world, women are more of a commodity to be entertained and consumed. Even the female rebel characters in the dystopian world are beautiful and sexually attractive.



Blade Runner is a 1982



Blade Runner is a 1982, Asia Argento



The Matrix (1999), Carrie-Anne Moss



Ghost in the Shell (1995 film)



ghost in the shell 2 innocence (2004)



Alita: Battle Angel is a 2019

The female characters in the major and influential Cyberpunk film and television works from 1982 to the present are mostly depicted with plump breasts and sexual characteristics. It is worth noting that Alita: Battle Angel (2019) seems to herald an important change. Alita is a successful character who is completely separated from the patriarchal normative society from body to mind. She is no longer deliberately emphasizing sexual attraction, feminine tenderness and The charm of submission.

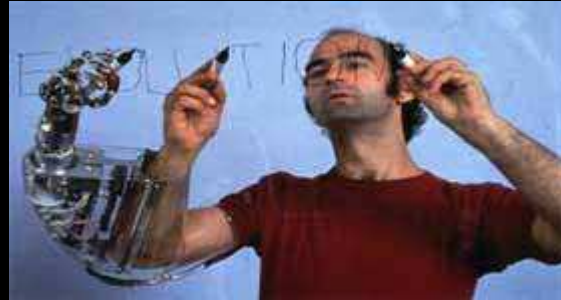
Robotic in Cyberpunk Art Practice : Contemporary art combining machines and the human body & Hajime Sorayama' Practice - tech is just a concept

Contemporary art that combines robots and the human body is mostly a performance-based interaction, and the combination of machines and the human body is mostly a spatial superposition and collage....



Atsuko Tanaka, member of the Gutai Art Group, wearing her Electric Dress in 1956.

*Robotic for
Performance*



Stelarc writing the word "Evolution" with his famous cyborganic experimentation the Thrid Hand.



Motherboard, implementation [13] (Suite, 2007). The project defines modular robotic wearables (MRW) as robotic systems composed of interactive robotic modules worn on the body.

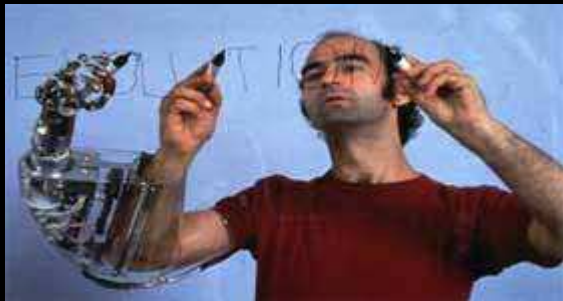


Robotic for concept

Inspiration :

force-connection

real tech + dystopian spirit + Art —> Cyberpunk women power



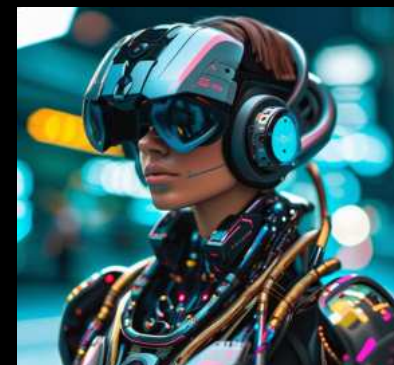
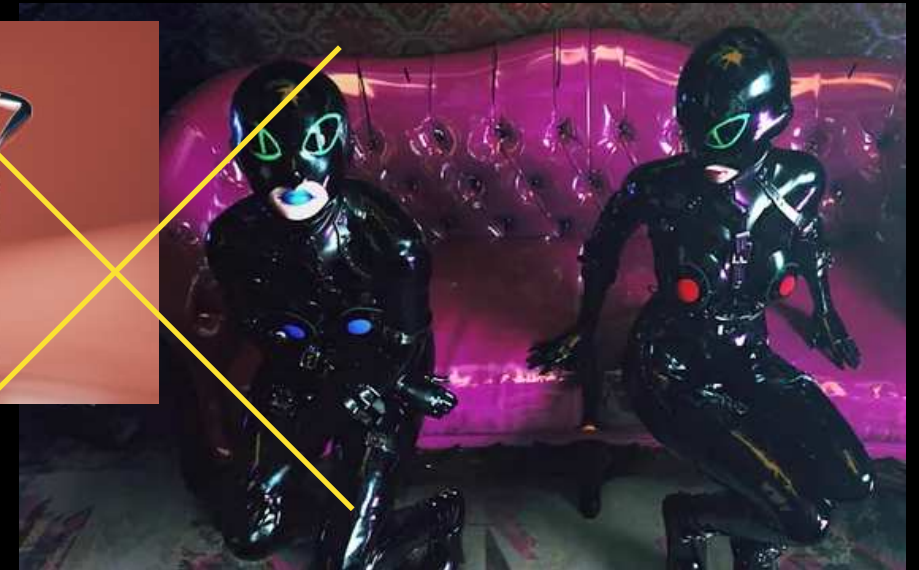
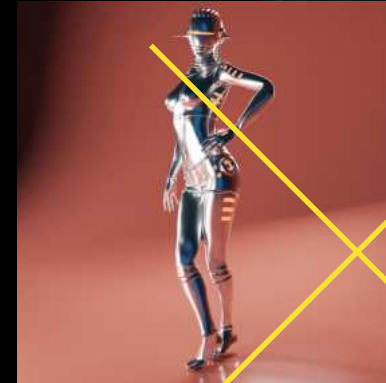
Robotic Tech

+

dystopian art Spirit



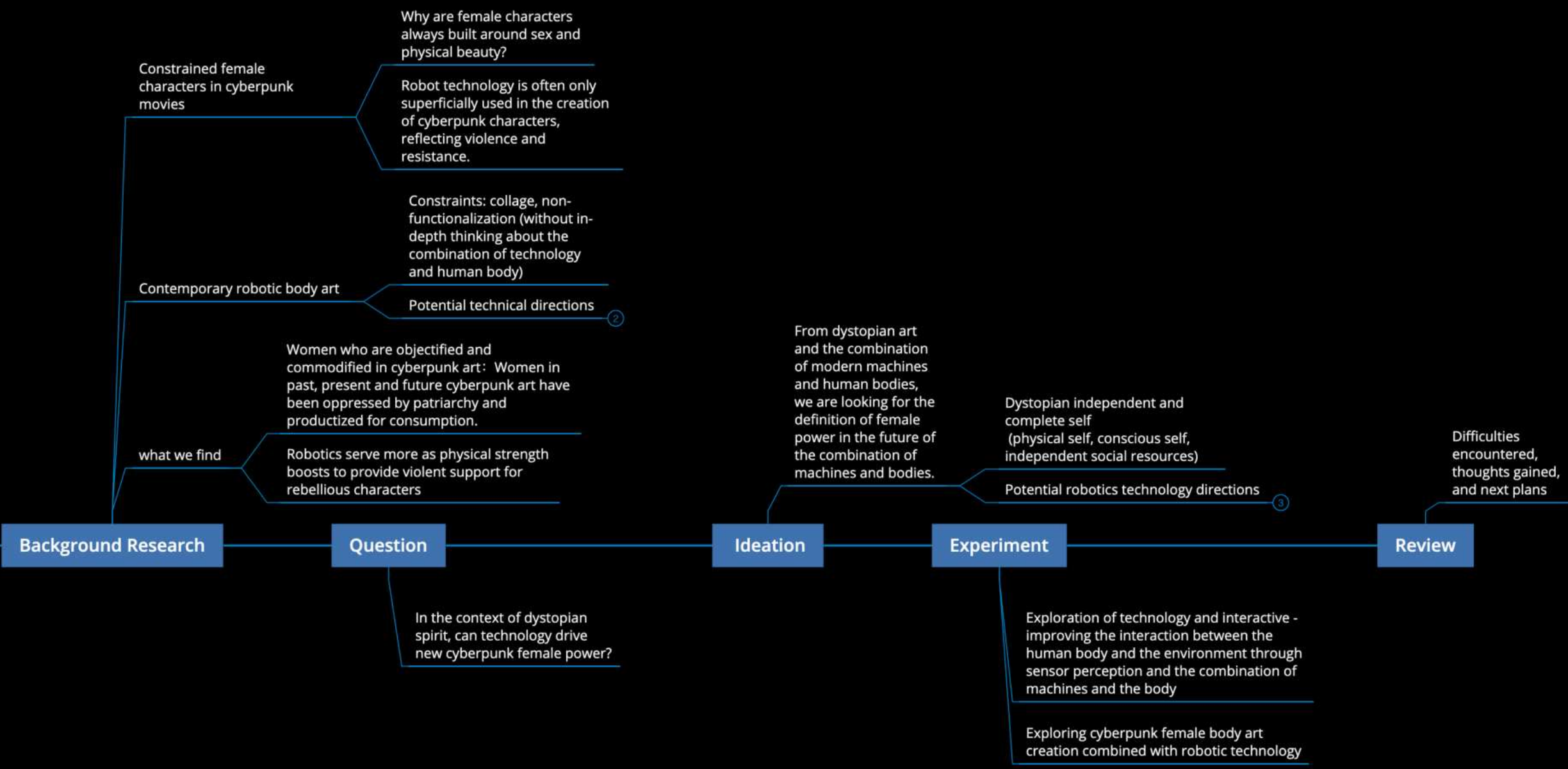
Art connection



Research Question

In dystopian art, driven by new technologies in the future, can women's power be redefined, and whether they can break through the constraints caused by genetic differences, patriarchal traditional cultural disciplines, structural gender inequality, information cocoons, etc...

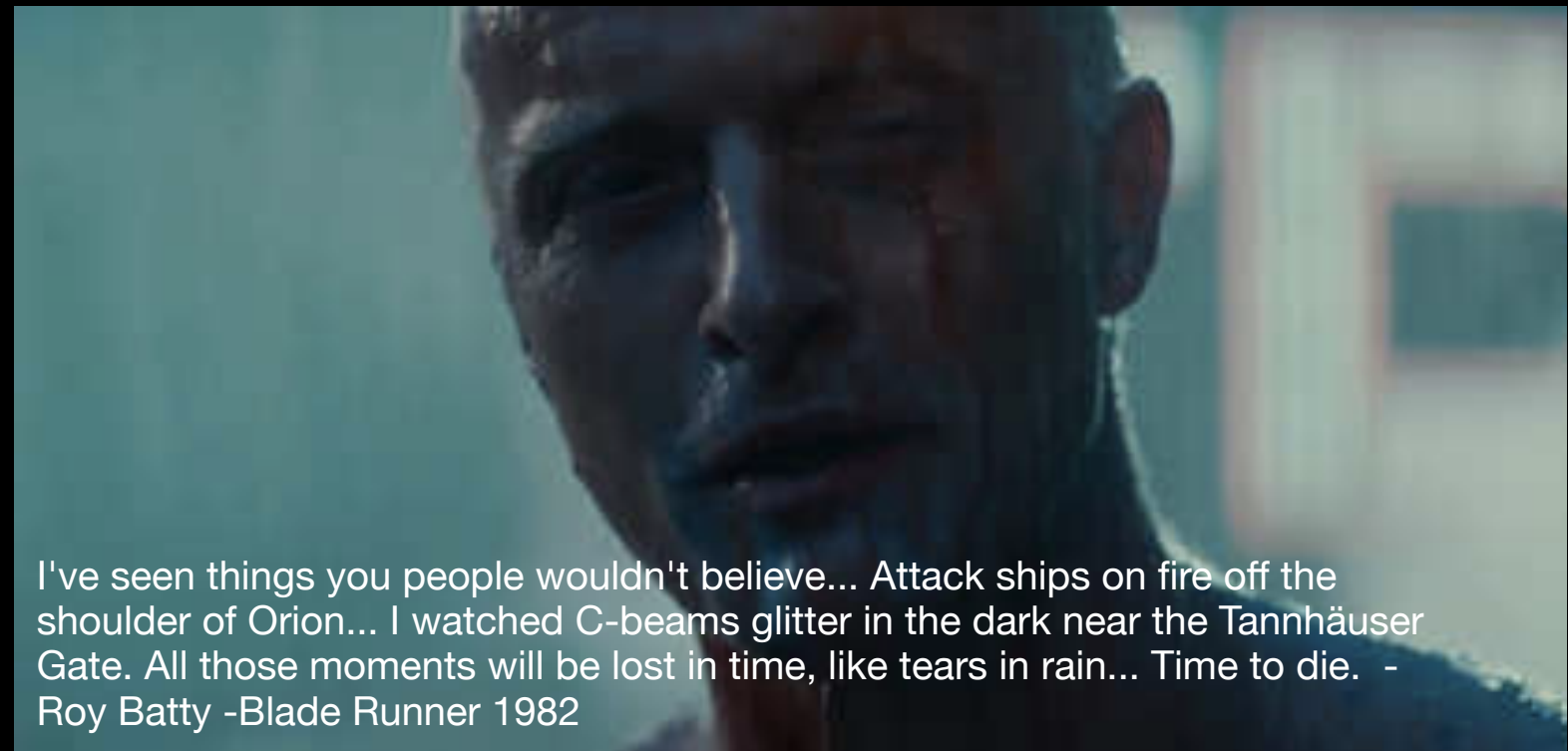
Research Roadmap



Spirit from cyberpunk film



“Tech Body”



I've seen things you people wouldn't believe... Attack ships on fire off the shoulder of Orion... I watched C-beams glitter in the dark near the Tannhäuser Gate. All those moments will be lost in time, like tears in rain... Time to die. - Roy Batty - Blade Runner 1982

“Cultural Body”

Li (2022) approaches cyberpunk films through Ihde's (2001)
- Don Ihde, Bodies in Technology

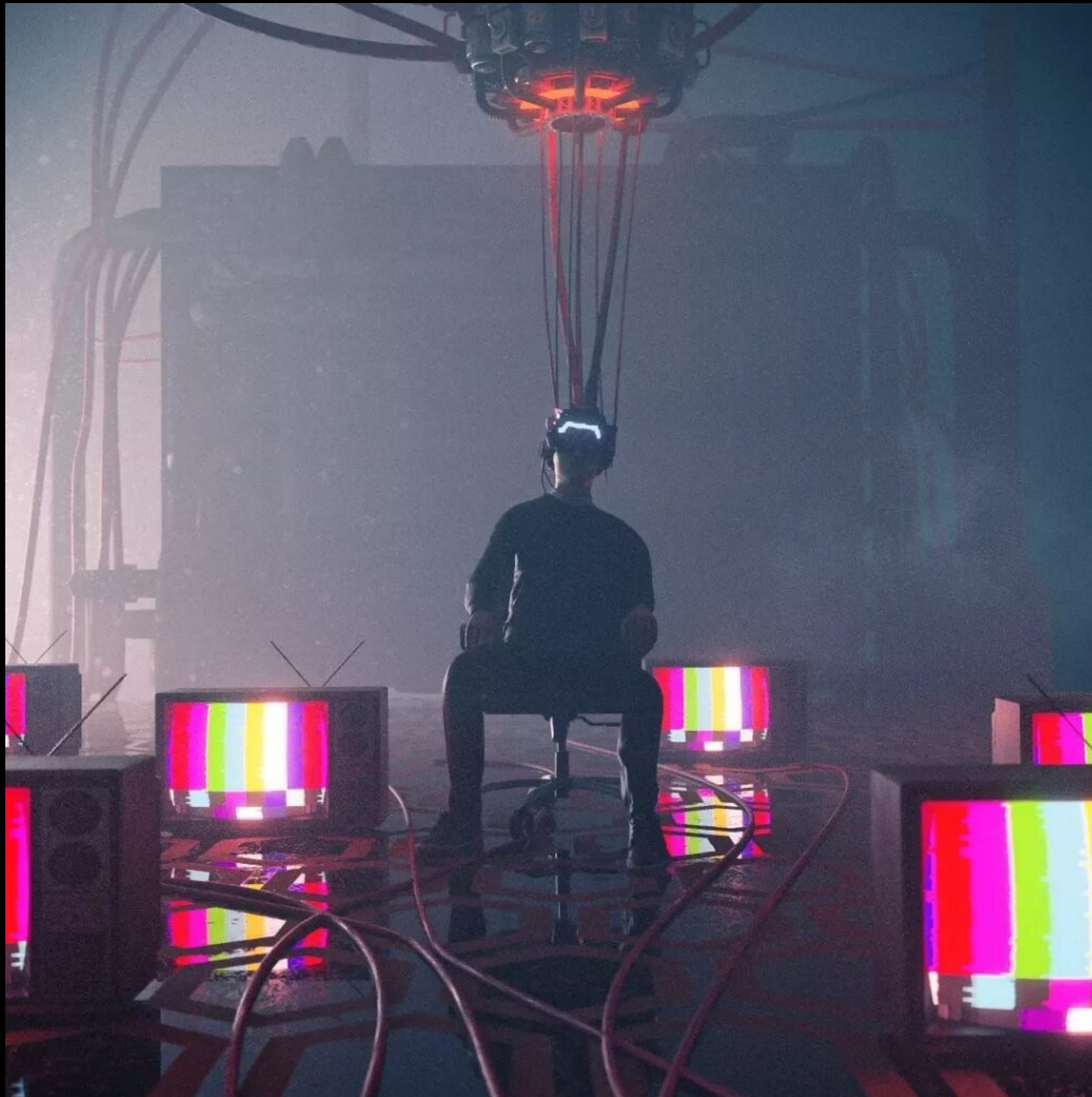
- The body is depicted, including
 - 1) the material body in mainstream aesthetics,
 - 2) the technical body,
 - 3) the cultural body in the meaning system.

The Climax Sense of the cyberpunk story always come at the moment when the characters realize the true existence of their bodies in the meaning system.

It's interesting how many of us, as real human beings, especially women who have been disciplined by thousands of years of totalitarian and patriarchal culture, live like “NPC” (non player character), secondary gender.

Spirit from dystopian art

There is an ideological conflict between the simple desire to move towards a more advanced and egalitarian society and the fear of today's unrestrained information monopolies, big data calculations, information cocoons, and dictatorships brought about by all kinds of technology.



“Fight for Equal “

Beksienski's paintings are always disturbing, depicting distortions, murder, depraved features and horrifying deformed corpse.

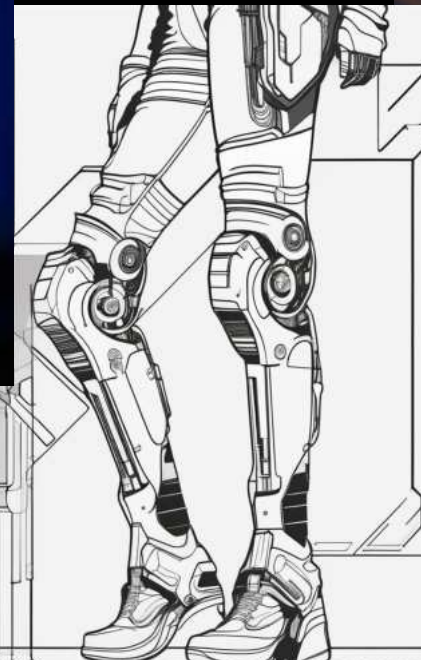
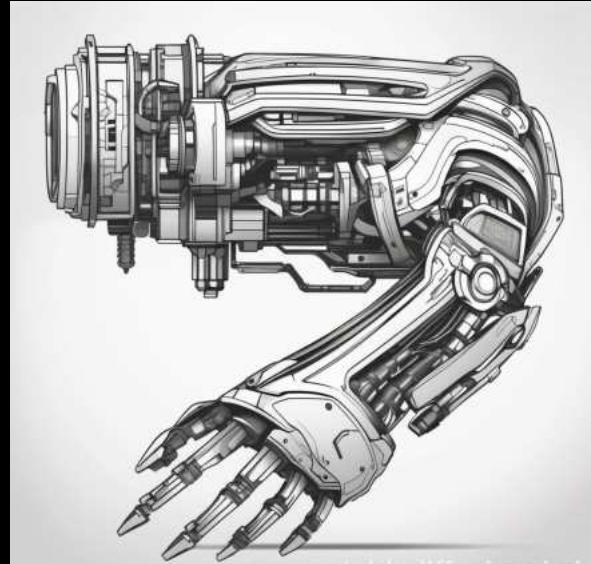
In cyberpunk's body art, due to the historical background and the "dystopian" society often shaped in movies, the characters themselves are endowed with the attributes of challenging dystopia, chasing resources, information, technology and gender equality in multiple dimensions

Robotic Body with tech for Physical Enhancement -Human bone augmentation and exoskeleton technology



Aimee Mullins says her special “cheetah” legs give her superpowers, NeuroRex exoskeleton uses a wearable electrode cap to read human brain waves and convert them into walking commands.

These biohackers, who have brought about the realization of the art of mechanized body modification that can guarantee the health of individuals, have a deeper practical understanding of machinery and sensors and data than the Cyberpunk characters in the movie in terms of technical realization.



AI technology generates demo

Experiment of Cyberpunk body ai art for “Physical Body”

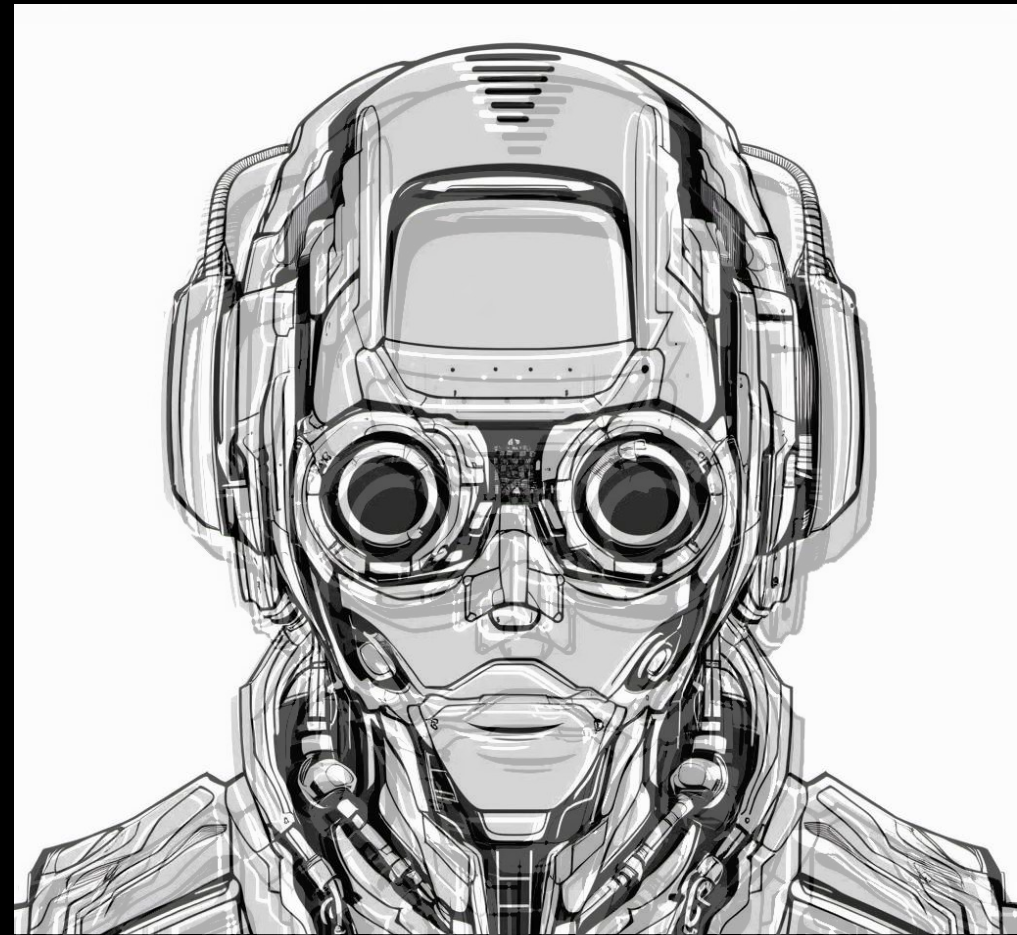
Robotic Body with tech for Environment Perception - Information sensing and filtering technology



Neil Harbisson, Hearing colours: bone-conduction induced synaesthesia

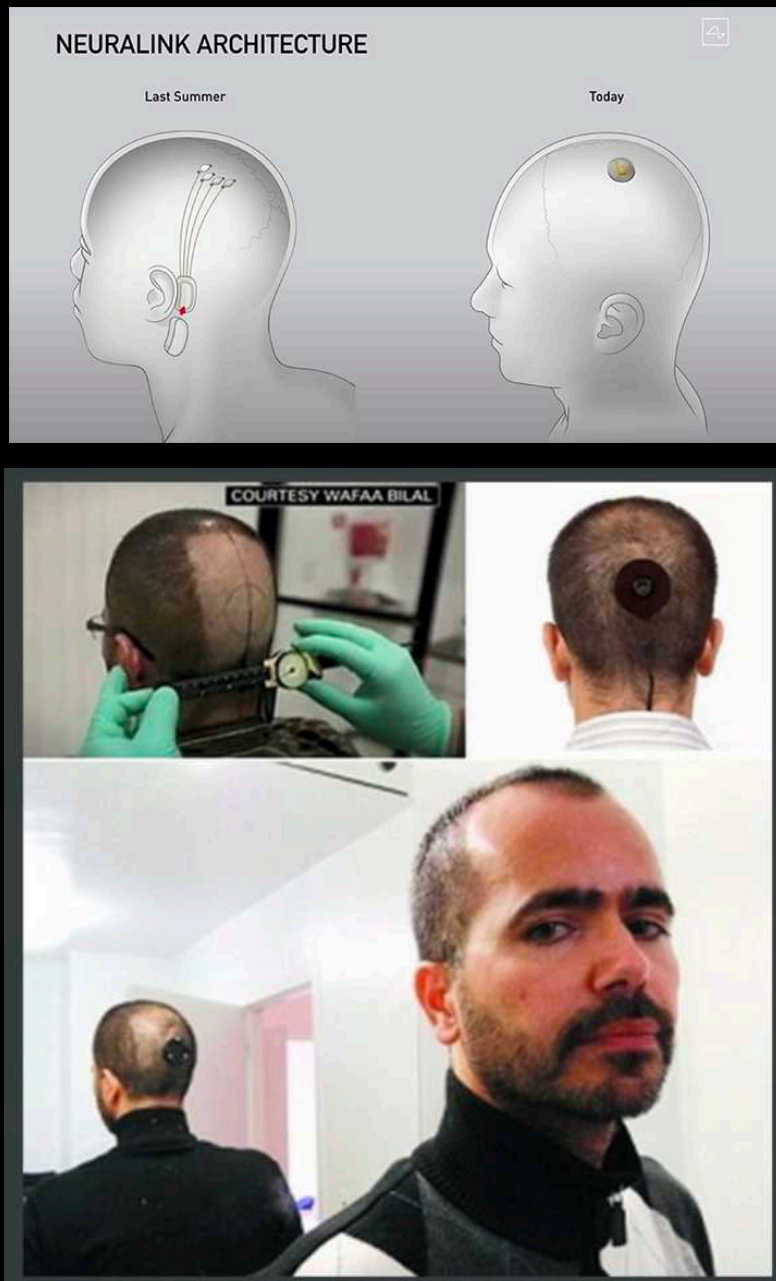
sensor can produce different sounds according to the colors it receives to help color-blind patients judge the world.

Functional wearables will integrate and interact with the human body and subvert the boundaries of human perception characters in the movie in terms of technical realization.



sketch work 1: experiment of Cyberpunk body art for
“Physical Body”

Robotic Body with tech for Brain-computer interface



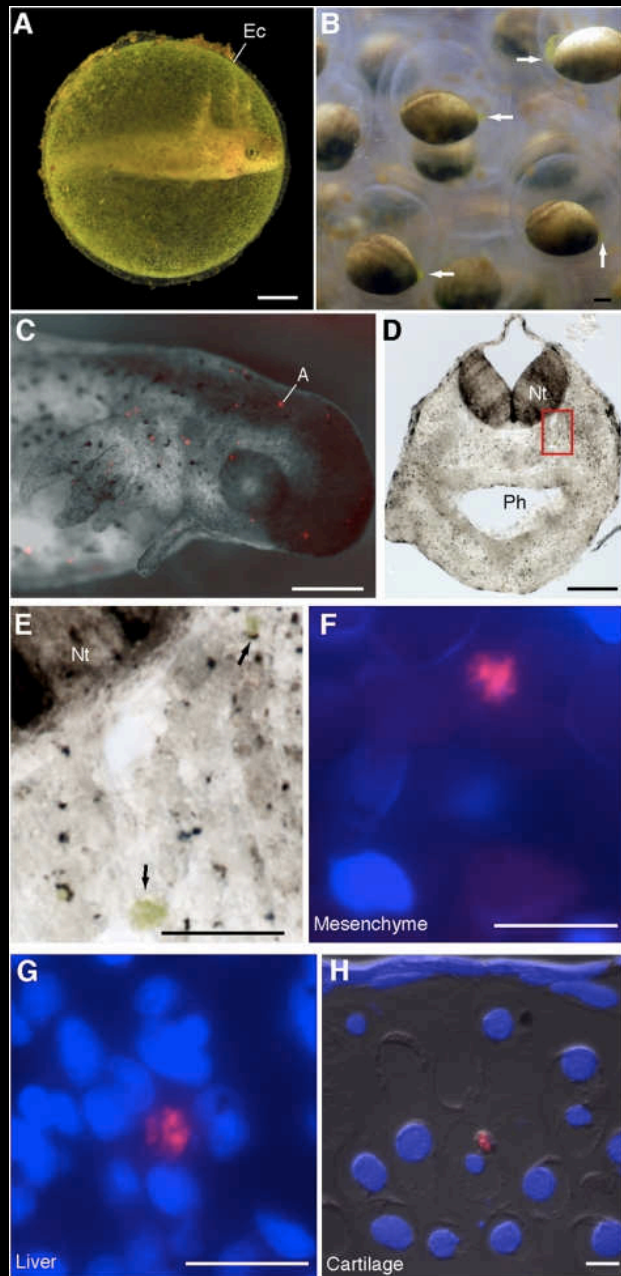
"Eye Behind the Head"
Brain-computer interface



AI technology generates demo

Brain-computer interface is also developing rapidly, which not only improves the efficiency of interaction between brain and mechanical limbs, but more importantly, similar to the body modification implanted with data sensors in Fig 8, in the process of acquiring external information, absolute equality of information rating can be achieved through encryption technology to avoid bad information, including the discipline of a small number of centralized classes.

Robotic Body with tech for independent self-sufficiency - Resist government monopoly of supply + COVID-19 pandemic



Cellular Photosynthesis -

The spotted salamander (*Ambystoma maculatum*) can also host vertebrates that perform photosynthesis in its own cells. Its eggs also contain algae cells, and the higher the content, the better the development.



sketch work - hand1 : experiment Cyberpunk
body art for “Physical Body”-Cellular
Photosynthesis
Attempts were made to combine the
creature's eggs with human hands, digital
drafts, and to consider rendering process in
some traditional printing ways, such as screen
printing, etching printing



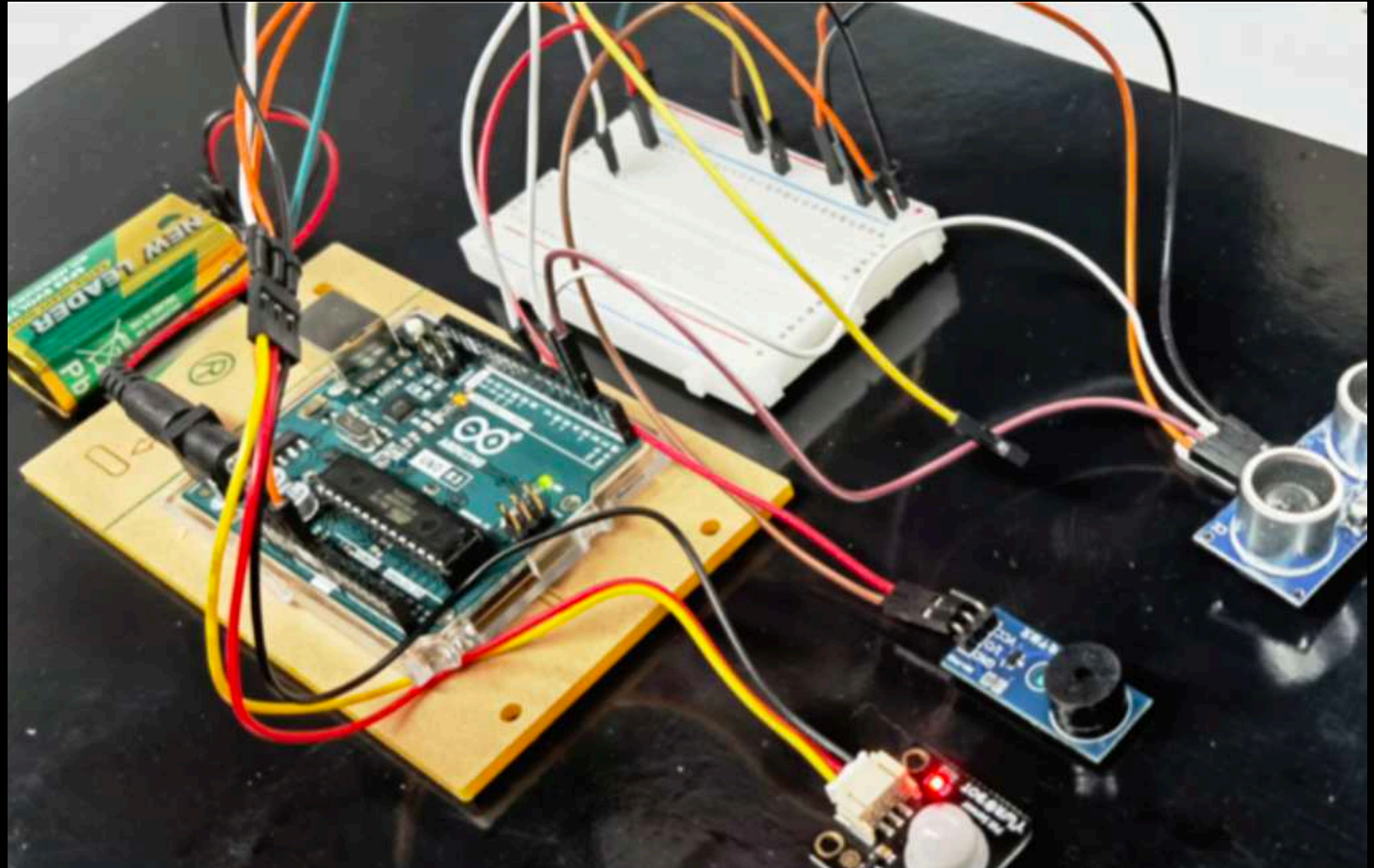
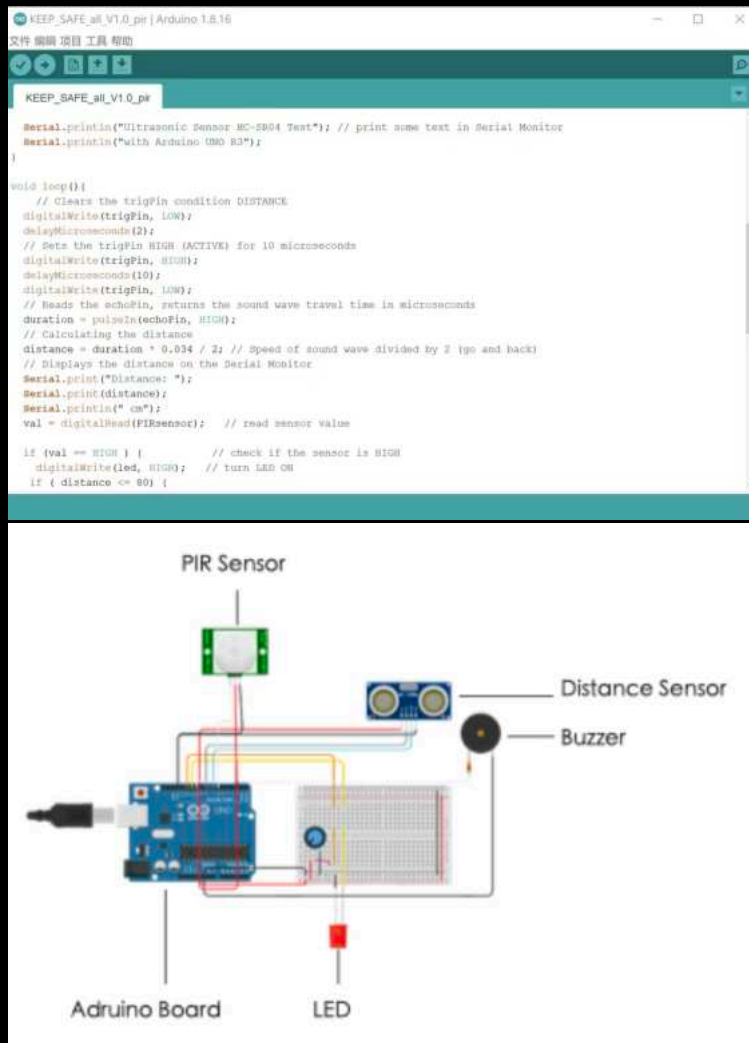
algaculture helmet allows humans to be semi-photosynthetic
burton nitta explores alternative ways to fuel the body through
'algaculture', creating a symbiotic
relationship between humans and algae. Creating a symbiotic
relationship between humans and algae.
But biologists have recently discovered that spotted salamander
(*Ambystoma maculatum*) can also host photosynthetic
vertebrates in its own cells, and its eggs also contain algae cells
and the higher the number, the better the development. This is an
important finding because vertebrates have immune systems that
prevent foreign cells from surviving in their bodies. Humans
themselves have the potential to contain algae cells and
photosynthesis in their bodies.

sketch work 2 : hand of character



Tech Experiment

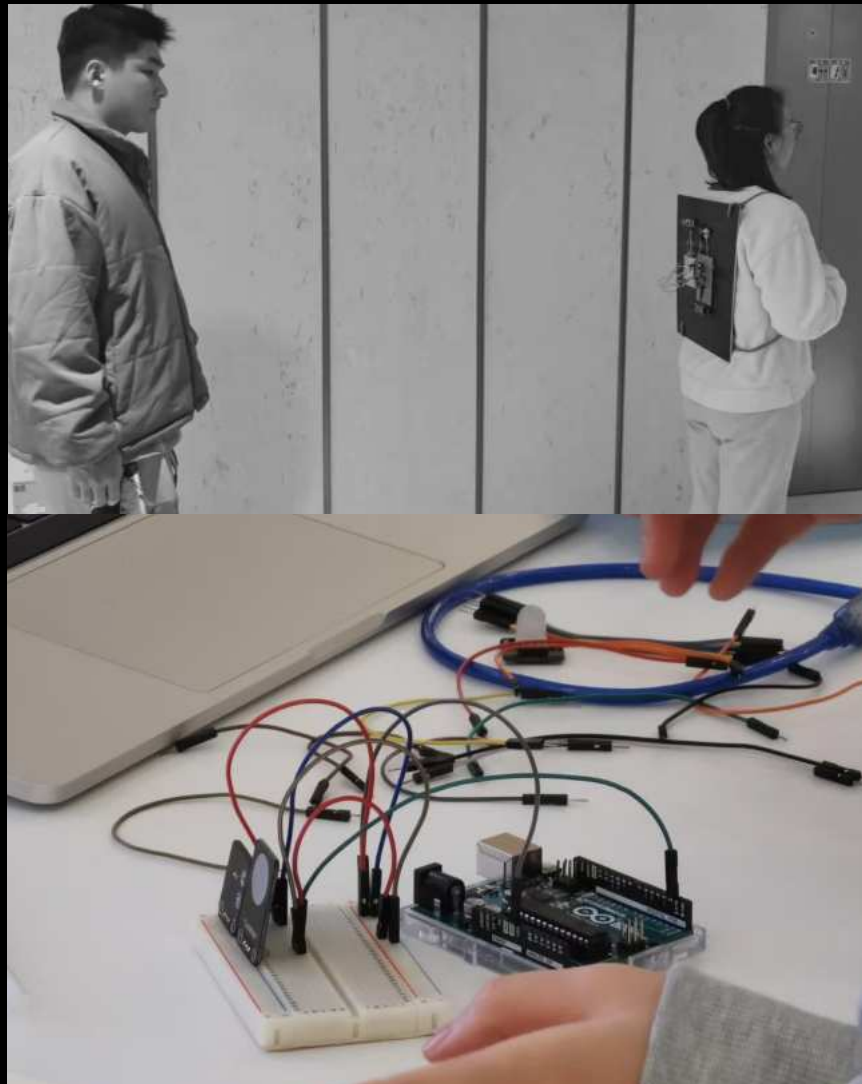
Exploration of technology and interactive - improving the interaction between the human body and the environment through sensor perception and the combination of machines and the body.



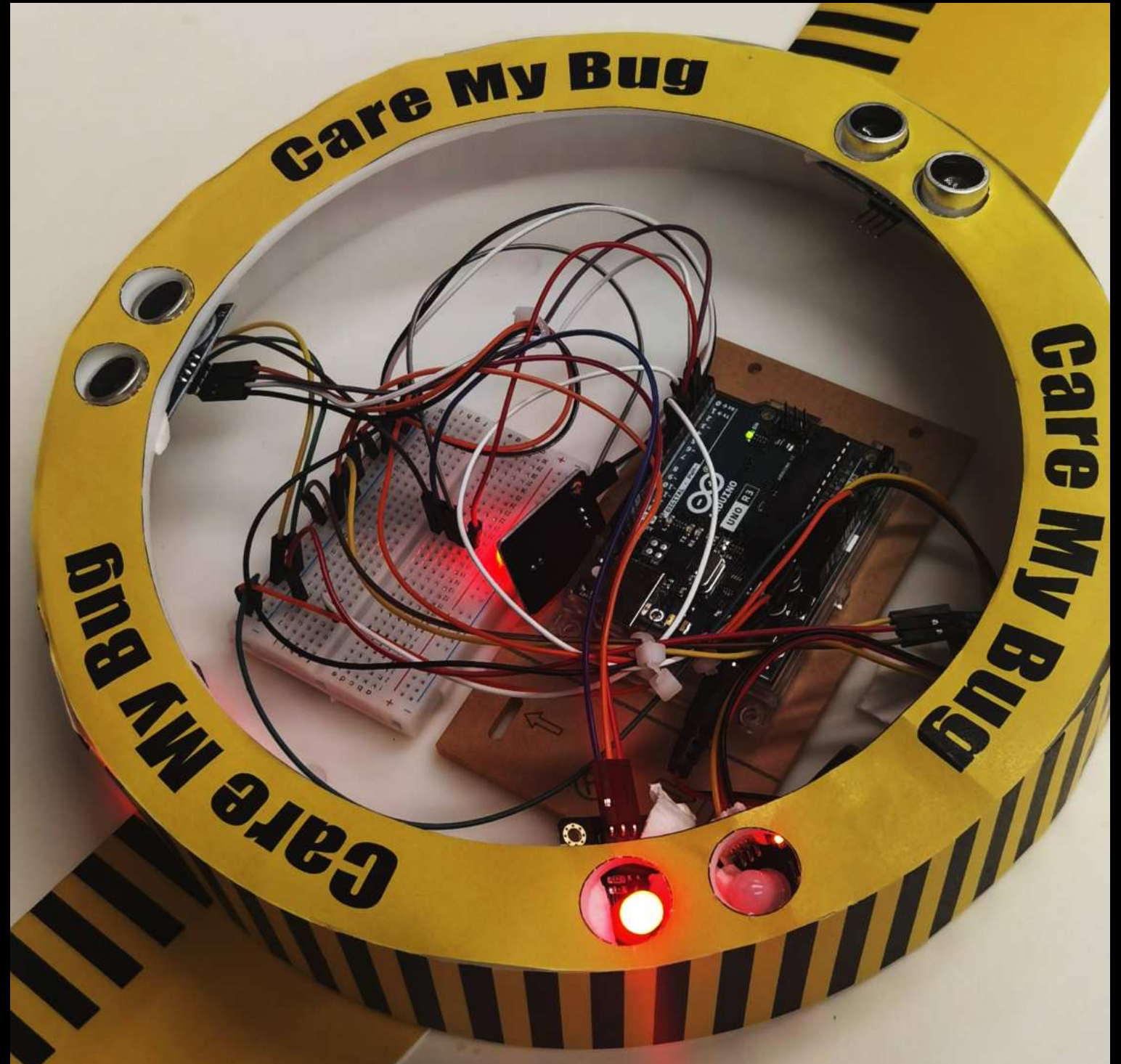
Hardware learning and attempting- demo

The input and output systems PIR Sensor, Distance Sensor, Buzzer and LED are implemented on the Arduino platform to achieve "Human-machine interaction with the environment feedback" at different distance

This is a little experiment before being super female.



This is just a small step trying, because human-computer interaction requires powerful hardware and software technology background. I am thinking about a new direction of research and practice, either in a more artistic way, or in the virtual world.



Human-machine hardware interaction attempt by Xiaoxia Chen

Art Experiment : Exploring cyberpunk female body art creation combined with robotic technology

Definition of key elements of the Robotic
“Cyberpunk Super Girl”

- Target users:
Rebels who are controlled and unfairly treated,
rebels who love technology
- Contours and shapes: Contours and shapes
need to be remembered and recognized.
- Functional and social:
Try to combine it with robotic exoskeletons to
form silhouettes - physical capabilities are
enhanced while satisfying body proportions
without affecting the character's daily actions
and humanity.
- Personality and Color:
Color and shape play major factors in the
relationship between visual impact and visual
composition. Super Woman is a hero who
emerges from the dark art space of dystopian
art and will find inspiration in feminist heroism
and feminist colors.
- Mechanical and technical elements
Enhanced machine exoskeleton, human
photosynthesis - "generated data
independence"; sensory enhancement system
- "information filtering and combating
information barriers" - (visual system;
biomaterial tattoo, brain-computer interface,
decentralization Data equality system.)

Next steps will using 3Dprinting to realize these
concepts



AI technology generates demo



*Art Practice :
Exploring cyberpunk female body art creation combined with robotic technology*



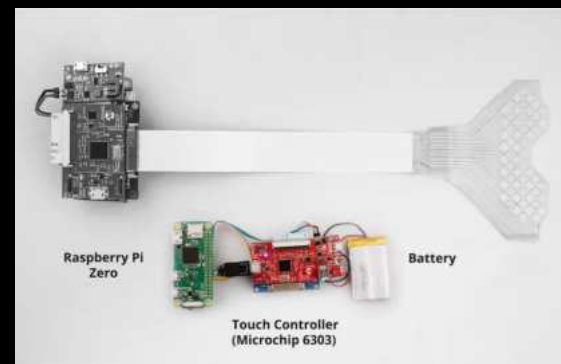
AI technology generates demo



Art Practice : Components, sensors, texture, power units and mechanical structures

Key components of the Robotic “Cyberpunk Super Girl”

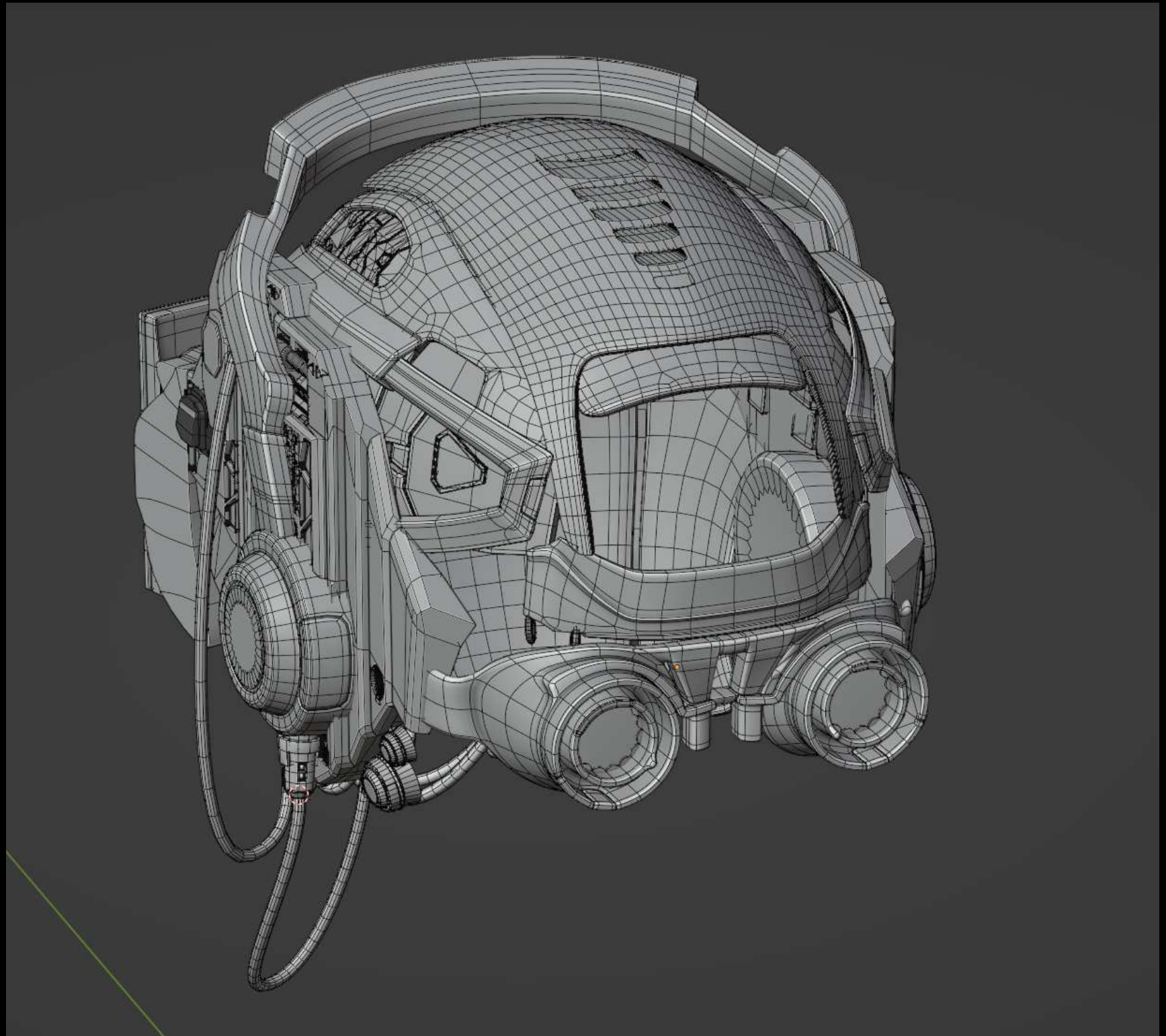
- LiDAR & Sonar sensors
- Robotic Exoskeleton & Linea Acurator
- Brain-computer interface
- Biological Ink & Cellular Photosynthesis
- Solar Power Panel



- example

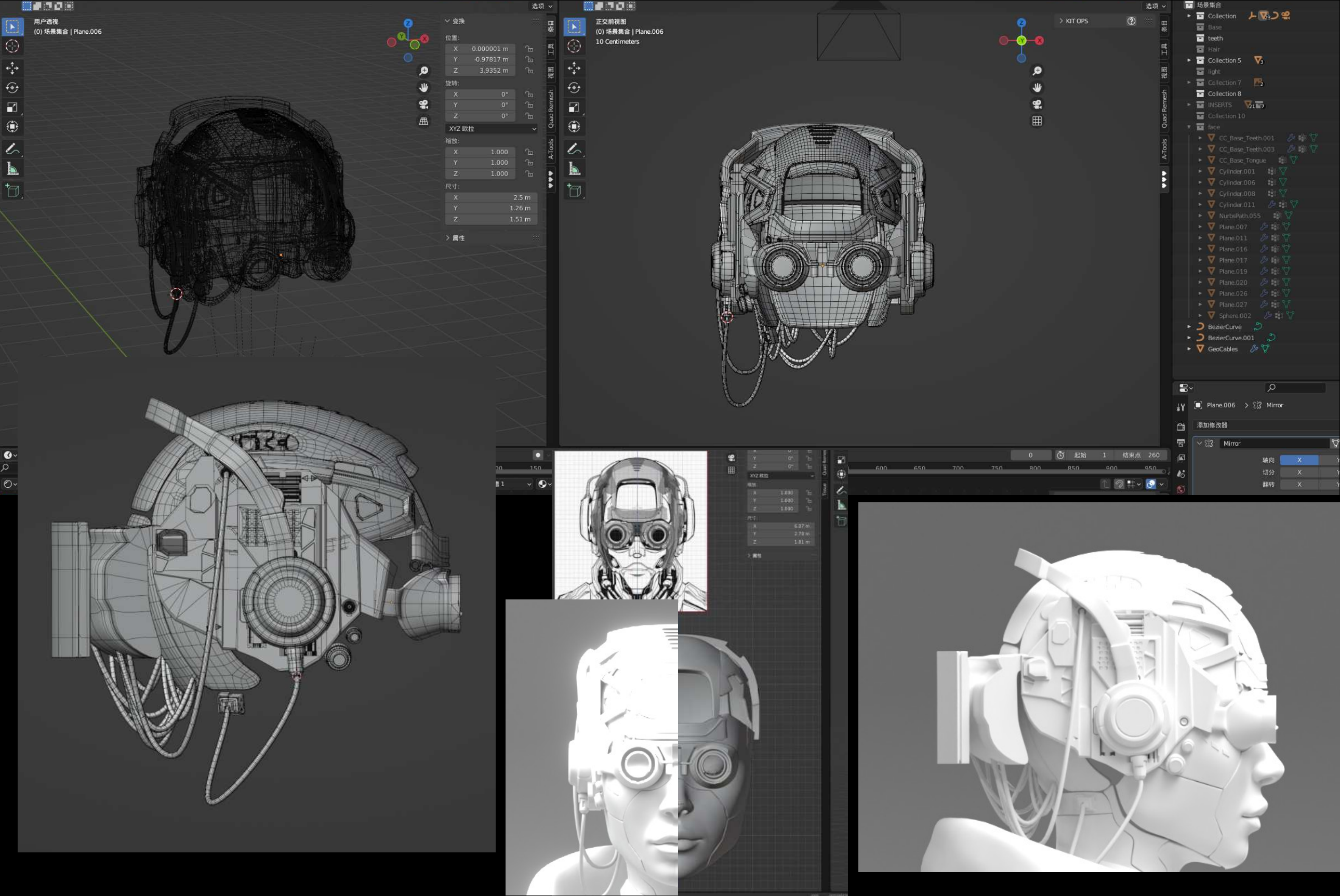
Evaluation

At present, it is difficult for me to achieve specific technical functions in practical applications. This requires me to constantly learn a variety of interdisciplinary Knowledge and skills. However, at the same time, I express my intentions through hand sketches, hardware attempts, 3D modeling and interactive performances, and I find it very interesting to explore the expression of art direction In the process of trying.



3D modeling demo by Xiaoxia Chen

3D modeling demo by Xiaoxia Chen





3D modeling demo by Xiaoxia Chen

To be continue...

Thanks

