PORTFOLIO

2026

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CONTACT

EDUCATION

华北理工大学
工业设计 本科
2023 年 9 月 — 至今
主修产品设计程序与方法、产品创新设计思维与方法、用户研究与产品定义、市场调研、人机工程学、数据统计与分析、工业设计工程学基础、产品成型方法与实践等

AWARD

蓝桥杯设计赛 全国三等奖
未来设计师艺术设计赛 全国二等奖
中国高校智能机器人创意大赛 全国二等奖
中国大学生机械工程创新创意大赛 全国二等奖
国际大学生智能农业创新装备大赛 全国二等奖
两岸新锐华灿奖 河北省一等奖
中国高校智能机器人竞赛 河北省一等奖
数字化创新设计赛 河北省一等奖
全国大学生机械创新设计赛 河北省一等奖
全国高校艺术设计大赛 河北省二等奖
全国大学生工业设计大赛 河北省二等奖
社会实践优秀个人
招生宣传突出贡献奖

LANGUAGES

Native//Chinese
English

EXPERIENCES

华北理工大学机械工程学院 | 班级团支书（2023.9 - 至今）
威县梨园屯镇人民政府办公室 | 社会实践志愿者（2024.1-2024.2）
北京大学出版社 | 校园大使（2024.9 - 至今）
麦辰（北京）科技发展有限公司 | 3D 建模师（2025.7-2025.9）
杭州英才人力资源有限公司 | 行业调研实习生（2026.7-2.026.9）

HONORARY

国家励志奖学金
一等奖学金
校园十佳
优秀大学生
优秀学生干部
优秀共青团员
优秀共青团干部

INTERESTS

Drawing, photography. music,Hulusi

SKILLS

Photoshop
Rhino
Keyshot
Figma
3dsmax
Blender

ABOUT **ME**

INDUSTRIAL PRODUCT
DESIGNER

DESIGN
PORTFOLIO

01

非洲动物迁徙观光车

CONCEPT DESIGN

EcoTrek

02

肛肠类手术术后清洁工具

PRODUCT DESIGN

PeriHeal

03

燕赵风华录

IP DESIGN

Yanzhaofenghualu

04

模型及其他作品

PRACTICAL DESIGN

Models and other works

2024

EcoTrek mission. S.A.F.A.R.I

A concept car for African Safari Research & Ecological Survey

.01

brief_

This project targets wildlife safari tourism on the African savanna. Conventional off-road vehicles produce loud noise and exhaust emissions, which easily disturb wild animals. There is a lack of professional sightseeing vehicles that balance ecological protection and all-terrain performance. Guided by the idea **"Blend into nature, enjoy wild fun"**, we developed this zero-emission electric all-terrain sightseeing vehicle.

The car uses solar power and a silent operating structure to avoid frightening wild creatures. It is equipped with high-strength suspension and off-road tires to adapt to savanna, mud and Gobi landforms. The 360° panoramic windows create an immersive viewing experience. Lightweight eco-friendly materials are widely used for the body and interior to strictly meet ecological requirements. This vehicle is applied to in African nature reserves.

EcoTrek

01.THE SKETCH

The sketch

The sketch captures a sculpted fluid forms that mimic the grace of African wildlife, ensuring both aesthetic appeal and aerodynamic efficiency.

fluid & bionic shape

02.THE MATERIAL

The body is crafted

The body is crafted from carbon fiber mixed with natural fiber, creating a composite material, matched with bio-based plastic structural parts. The lightweight structure reduces energy consumption, while the low-carbon raw materials fit the ecological protection theme. The roof is equipped with photovoltaic panels to realize solar power supply for long-distance self-driving in the wilderness.

eco lightweight material

03.THE EXPERIENCE

What makes an immersive safari environment?

tech

The 360° panoramic glass cabin and silent electric drive offer an immersive and non-intrusive wildlife viewing experience.

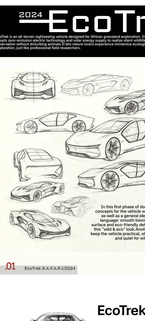
outdoors

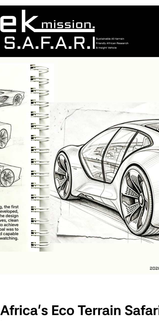
The high-ground clearance and long-travel suspension adapt to savanna, mud and Gobi terrain.

gaze

The full-size glass window breaks the boundary between humans and the wild, letting visitors fully blend into nature.

the story of a safari dream





the concept_

This project develops an **eco-friendly all-terrain safari sightseeing vehicle** and a complete wild exploration experience for 2025.

While exploring new ecological wilderness, we bring the dream of wildlife observation to ordinary travellers. The whole experience builds multiple wilderness base camps across Africa, as the starting point of off-road wildlife observation. These camps run entirely on solar energy, adapt to local natural ecosystems, and can also be used as emergency rescue stations.

Users book the safari trip first, then depart for the base camp. In the following days, they will learn about the local environment and the silent sightseeing vehicle, make travel plans and prepare supplies.

When everything is ready, they start their journey and enjoy an immersive wildlife tour just like professional ecological explorers.

2024

EcoTrek mission. S.A.F.A.R.I

A concept car for African Safari Research & Ecological Survey

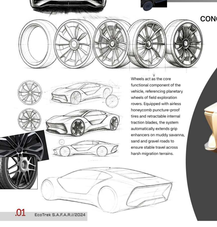
EcoTrek is an all-terrain sightseeing vehicle designed for African grassland exploration. It emphasizes silent operation, zero exhaust emissions, and solar energy supply to realize close wildlife observation without disturbing animals. It also carries basic equipment for long-distance ecological exploration, just like professional field researchers.

The major source of inspiration was African wild creatures. We take reference from animal body lines, streamline shape and panoramic cabin layout.

In this first phase of doodling, the first concepts for the vehicle were developed, focusing on capturing the dynamic body language: smooth bionic curves, clean surface and eco-friendly details, to achieve the "Blend into nature" concept. We also keep the vehicle practical, off-road capable and quiet for wildlife watching.

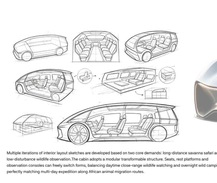
EcoTrek—Africa's Eco Terrain Safari VehicleEcoTrek

EcoTrek

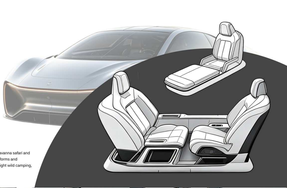


CONCEPT DESIGN

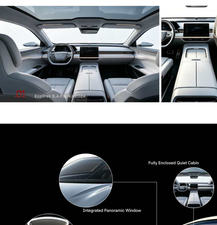
The Great Migration of African Animals



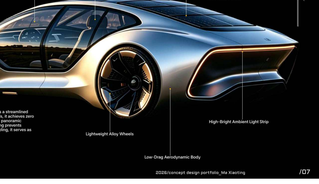
Wheels act as the core functional component of the vehicle, referencing planetary wheels of field exploration rovers. Equipped with airless honeycomb puncture-proof tires and retractable external spikes, the wheels can automatically extend grip enhancers on muddy savanna sand and gravel roads to ensure stable travel across harsh migration terrains.

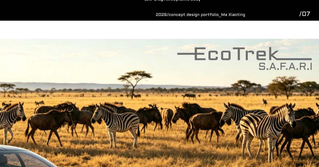


This render presents the finished side profile of the vehicle. It adopts a compact one-box off-road proportion with an overall length of only 4 meters, enabling flexible navigation through savanna woodlands. The ultra-high ground clearance and wide off-road wheels easily traverse slopes, river crossings and other obstacles during migration routes. The vehicle is equipped with a panoramic silent safari cabin, long-distance wildlife observation windows and an off-grid water & energy storage system. Abundant lightweight protective details build a professional carrier for wildlife migration observation and ecotourism.



Multiple iterations of interior layout sketches are developed based on two core demands: long-distance savanna safari and low-disturbance wildlife observation. The cabin adopts a modular transformable structure. Seats, rear platforms and observation consoles can freely switch form, balancing daytime close-range wildlife watching and overnight wild camping, perfectly matching multi-day expedition along African animal migration routes.





EcoTrek

This vehicle is designed for wildlife migration tours in Africa. It features a streamlined body and silent electric drive, enabling close observation of animals with zero exhaust emissions to protect grassland ecosystems. The large-area panoramic windows deliver unobstructed viewing experience, and the silent driving prevents disturbance to wildlife. Combining practicality, comfort, and futuristic styling, it serves as an exclusive tour vehicle for sustainable eco-tourism.

EcoTrek S.A.F.A.R.I

EcoTrek S.A.F.A.R.I

2025 PeriHeal PROJECT

Home Recovery
Anorectal Care
Hand-held Cleaning Device

.02

brief_

This project is a portable cleaning tool for post-anorectal-surgery home-care. Oriented at patients after anorectal surgery, the gun-shaped handheld device simplifies operation procedures for local cleaning. It improves convenience and hygienic experience during home recovery, while taking both medical-device safety and ergonomic hand-holding comfort into consideration.

RESEARCH

SITUATION OF ANORECTAL POST-OPERATIVE CARE

Anorectal surgery patients face obvious discomfort during home recovery. Wound cleaning is critical for rehabilitation. Many patients suffer from improper cleaning methods, poor hygiene experience and inconvenient operation in daily home-care, which affects wound healing and living quality.

120 Million

35%

RESEARCH

EXISTING PRODUCTS ANALYSIS

There are various anorectal postoperative cleaning products on the market. Most traditional products have defects such as single function, poor ergonomics and unstable cleaning effect, which cannot fully meet the needs of home-based postoperative rehabilitation.

USER INTERVIEW

① Do you feel difficult to complete local cleaning at home?
② Are you unsatisfied with your current cleaning tools?
③ What functions do you expect for new home-care cleaning tool?
④ Which factors do you value most for medical home-care products?

Place: Offline **Method:** Face-to-face

Most patients report that traditional cleaning solutions are labor-intensive and hard to control. They hope to get an easy-to-operate handheld device, to improve cleaning safety and comfort during home recovery.

Age:28-65 **User Group:** Post-anorectal-surgery patients

RESEARCH & IDEATION

DESIGN REQUIREMENTS

Summarize core requirements from previous research and user interviews, and define design constraints for the handheld home-care cleaning device.

① Human-centered grip for comfortable operation posture

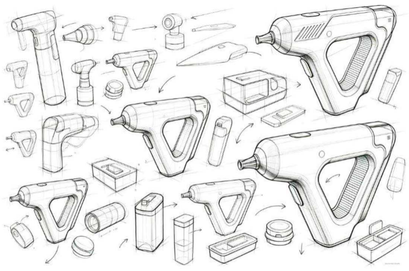
② Adjustable water pressure to adapt different wound conditions

③ Detachable nozzle structure for hygiene maintenance

④ Compact size for convenient home storage

Develop multiple handheld sketches, evaluate schemes on ergonomics, sealing and feasibility. Disassemble similar products to study water-supply, pressure-adjustment and sealing structures for design iteration.

CONCEPT DEVELOPMENT



RENDERINGS

PeriHeal

RENDERINGS

2026燕赵风华录 HEBEI IP IMAGE DESIGN

文化传承 cultural inheritance

地域特色 regional characteristics

情感共鸣 emotional resonance

.03

brief_

This "Yanzhao Fenghua Lu" cultural and tourism IP is based on the local culture of Yanzhao, adhering to the idea of **tradition** as the root and **innovation** as the wing, extracting regional elements such as Hebei Bangzi, Wuqiao acrobatics, and Tangshan bone porcelain, shaping five characters with cute cartoons, revitalizing traditional culture with modern aesthetics, creating Hebei **exclusive cultural and tourism symbols**, and showcasing the new style of Yanzhao culture.

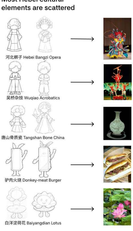
/16

China's cultural creative industry shows strong growth momentum. Compared with other major global economies, it has obvious growth advantages, which provides market opportunities for regional cultural IP development.

Most local Hebei cultural creative products are postcards, keychains, paper-cuts and museum souvenirs. Product forms are homogeneous, few complete IP-character systems have been formed.

Collect extensive Hebei regional cultural candidates, covering opera, intangible heritage, folk custom, cuisine, architecture and natural features.Screen from candidate elements, considering identifiability, visualization, story-telling and IP-adaptability. Finally confirm five core elements for character modeling.

Most Hebei cultural elements are scattered



Why Not One Core IP with Multiple Derivative Characters?

With a perfect cultural core as the shared prototype, we can develop multiple regional sub-characters. One core IP cuts design cost and redundant development, strengthens the tourism brand system, and retains tourists via the IP matrix.

Turning Tourist Demand into Competitive Advantage.

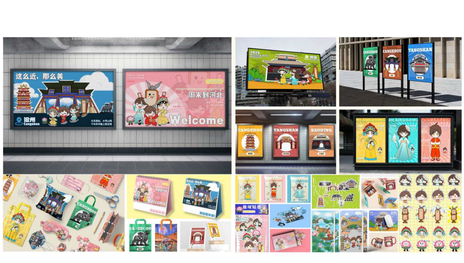
Each character is given a unified cultural story, visual design, product durability and creative scenarios. The average visitor buys multiple cultural products. A shared core IP avoids repeated design, cuts cost and waste, and builds user loyalty with a complete IP ecosystem.

★ IP核心价值

★ IP应用场景分布

How to embed Yan-Zhao cultural features into IP and keep forms suitable for derivatives.

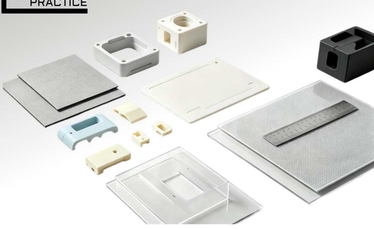
Local totems and patterns are abstracted and applied to costumes and props. Simplify character's outline and details. Rounded modelling enhances affinity, simplified silhouette guarantees recognition for multi-scene application.



IP Image Design

This 2D series translates Hebei's profound regional heritage into modern-oriented cartoon characters, realizing the creative transformation of traditional culture.

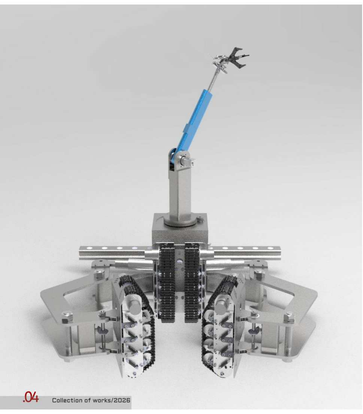
2026 PROTOTYPE PRACTICE



.04

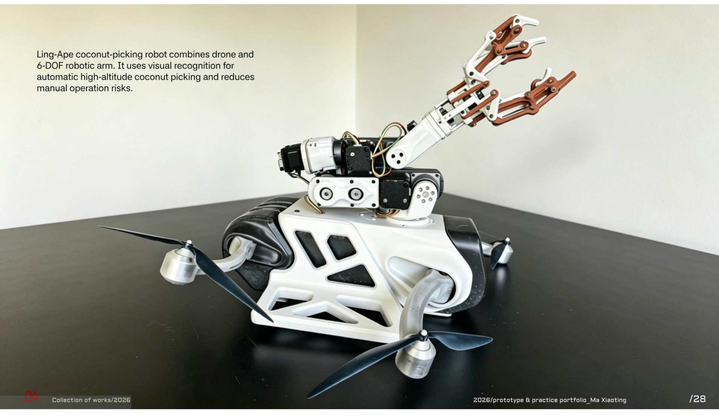
brief_
This chapter demonstrates 3D-modeling, structural deduction, prototype fabrication and physical practice. Models are applied to verify form, structure and ergonomics, realizing the transformation from virtual scheme to physical product.

Household intelligent cleaning robot with multi-DOF robotic arm. It navigates autonomously to clean glass and floors, avoiding high-altitude risks.

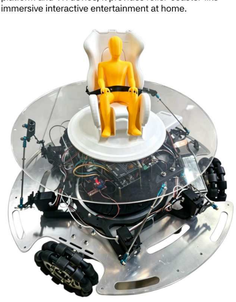


Yeti-Guard tree-climbing coconut harvesting robot adopts adaptive track climbing structure. With vision recognition and robotic arm, it realizes automatic coconut picking and avoids high-altitude risks.

Ling-Ape coconut-picking robot combines drone and 6-DOF robotic arm. It uses visual recognition for automatic high-altitude coconut picking and reduces manual operation risks.



6-DOF immersive somatosensory robot. Based on Stewart platform and VR device, it provides roller-coaster-like immersive interactive entertainment at home.



THANKS!

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