

# Creative Connections II

Art, Technology and Innovation

Yi Ji & Sean Clark



创意联想

艺术，技术与创新

纪毅 & 肖恩·克拉克

**Cover Image : Guangxi Zhuang Intelligent Interactive Handmade Bronze Drum**

Creators: Liang Zhirui、Huang Xinying、Cheng Lixin、Zhang Rui、Yi Tanjie

**封面照片：** 广西壮族智能交互手工铜鼓

**作者：** 梁芷睿、黄欣荧、程丽欣、张睿、艺谭捷

# **Creative Connections II**

## **Art, Technology and Innovation**

### **创意联想：艺术，技术与创新**

**Yi Ji / 纪毅**

**Sean Clark / 肖恩·克拉克**

**Guangdong University of Technology**  
**广东工业大学**

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**Acknowledgements**  
**致谢**

# Introduction

For almost a decade, I have had the privilege of returning to China to work with students at the School of Art and Design at Guangdong University of Technology. During that time, I have seen both the technologies we use and the students' ambitions evolve, while the purpose of the workshops has remained consistent: to encourage experimentation, curiosity, and creative thinking through making. This catalogue marks another milestone in that journey. Alongside work produced at Guangdong University of Technology, it is the first to include projects from our new workshops at Guangdong University of Science and Technology, as well as work created independently by students and associates who continue to explore these ideas beyond the classroom.

A defining characteristic of our workshops has always been the importance of grounding new technologies in Chinese culture.

Students are encouraged to draw upon their own experiences, traditions and cultural heritage, using digital media to interpret and extend ideas that are meaningful to them. The resulting projects demonstrate that technology does not diminish cultural identity. Instead, it provides new ways of expressing it. Whether inspired by traditional crafts, folklore, everyday life or contemporary Chinese society, the strongest work grows from the combination of technical experimentation and cultural understanding.

Many of the projects included here were developed during workshops using the BBC micro:bit. Originally designed as an educational computer, it provides an accessible platform for exploring interactive design, physical computing and creative coding. Its simplicity allows students to move quickly from an idea to a working prototype, encouraging experimentation rather than technical complexity.

The rapid development of Artificial Intelligence is adding another dimension to our work. Rather than treating Artificial Intelligence as something to be avoided, I believe students should learn how to use it thoughtfully and responsibly as part of their creative process. Throughout the workshops, they are encouraged to experiment with AI where it adds genuine value, whether helping to develop ideas, refine designs or overcome technical challenges. However, it is always presented as a tool that supports their own thinking rather than replacing it. The aim is not simply to produce work more quickly, but to produce better work. As AI becomes increasingly integrated into creative practice, qualities such as curiosity, critical judgement, cultural understanding and originality become even more important.

The projects presented here reflect these principles. They demonstrate the value of experimentation, collaboration and learning through making, while celebrating the individuality of every contributor.

They also suggest that the future of creative education lies not in teaching students to rely on particular technologies, but in giving them the confidence to adapt as those technologies continue to evolve. The tools will undoubtedly change, as they always have, but the ability to think creatively, draw upon culture and use technology with purpose and imagination will remain at the heart of meaningful creative practice. It is these qualities that I believe this catalogue celebrates.

**Sean Clark**

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# 介绍

近十年来，我有幸多次回到中国，在广东工业大学艺术与设计学院与学生们一起开展工作。在这段时间里，我看到我们所使用的技术不断演进，学生们的志向也在持续变化，而工作坊的核心目的始终如一：通过实践创作，鼓励实验精神、好奇心与创造性思维。这本作品集标志着这一历程中的又一个重要里程碑。除了广东工业大学的创作成果之外，它也是首次收录来自我们在广东科技大学新工作坊的项目，以及由持续在课堂之外探索这些理念的学生与合作伙伴独立完成的作品。

我们工作坊的一个显著特征，一直是强调将新技术扎根于中国文化之中。我们鼓励学生从自身经历、传统与文化遗产出发，运用数字媒体去解读并延展对他们具有意义的观念。这些项目的成果表明，技术并不会削弱文化认同，反而为其提供了新的表达方式。无论灵感来自传统工艺、民间传说、日常生活，还是当代中国社会，最优秀的作品都源于技术探索与文化理解的结合。

本书中的许多项目是在使用 BBC micro:bit 的工作坊中完成的。它最初作为一款教育型计算机被设计，用于支持互动设计、物理计算与创意编程的入门探索。它的简洁性使学生能够快速将想法转化为可运行的原型，从而鼓励实验而非复杂的技术实现。

人工智能的快速发展正在为我们的工作带来新的维度。我认为，与其将人工智能视为需要回避的事物，不如让学生学习如何在创作过程中有意识、负责任地使用它。在整个工作坊中，我们鼓励学生在真正能够带来价值的地方尝试使用 AI，例如帮助发展创意、优化设计或解决技术难题。但它始终被视为一种辅助思维的工具，而不是取代思考本身的存在。我们的目标并不仅仅是更快地完成作品，而是创作出更好的作品。随着人工智能日益融入创意实践，好奇心、批判性判断、文化理解与原创性等品质也变得愈发重要。

这里呈现的项目正体现了这些原则。它们展示了实验、协作与在实践中学习的价值，同时也彰显了每一位参与者的独特性。它们同样表明，创意教育的未来不在于教会学生依赖某一种特定技术，而在于赋予他们在技术不断演变过程中持续适应的能力。工具无疑会不断变化，这一点从未改变，但创造性思维、文化积累以及有目的地、富有想象力地运用技术的能力，将始终是有意义的创意实践的核心。我认为，正是这些品质构成了这本文集所要庆祝的内容。

**肖恩·克拉克**

国际教授

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# School of Art and Design at Guangdong University of Technology

The School of Art and Design at Guangdong University of Technology is one of China's premier design colleges, renowned for its seamless integration of design practice and the creative industries. In the "2023–2024 Best Chinese Disciplines" rankings, compiled by ShanghaiRanking (formerly "Global Ranking of Academic Subjects"), its Design discipline was placed fifth nationwide, retaining its status as a "China Top Discipline." The School confers doctoral and master's degrees in the first-level discipline of Design and has six undergraduate programs accredited as National First-Class Undergraduate Specialty Construction Sites. In recent years, in the ShanghaiRanking's Best Chinese Universities Major Rankings, three design-related majors have been rated A+, and the remaining four majors have received an A.

The School employs over 170 teaching staff, including multiple national-level high-calibre talents and award-winning "Curriculum Ideology and Politics" instructors appointed by the Ministry of Education. Its highly internationalised teaching team features more than twenty full-time and visiting foreign faculty members from the UK, Australia, Singapore, Finland, Spain, South Korea, and elsewhere, offering over twenty fully English-taught international workshop courses each year.

The School offers a joint undergraduate–master's programme (3+1) in Visual Communication Design with the University of East Anglia, UK, and a dual bachelor's degree programme (3+1) in Digital Media Technology with the Berlin Mediadesign University of Applied Sciences, Germany. These collaborative programmes are designed to cultivate high-quality, innovative talents with an international design perspective.



The School enrolls more than 3,300 students across its bachelor's, master's, and doctoral programmes. Faculty and student works have been repeatedly selected for national art exhibitions, and the School has amassed hundreds of prominent domestic and international design awards, including the iF Design Award, Red Dot Design Award, and GuanghuaYoung Talent Award.

Each year, numerous graduates secure positions in leading enterprises with market capitalisation exceeding RMB 100 billion—such as Huawei, Tencent, Alibaba, GAC, and Midea—while many others pursue advanced study at top international design institutions.

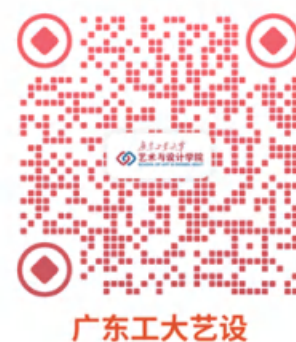
The School's core research and teaching platforms include the Guangdong International Advanced Design Centre, the Large-Scale Vehicle Design and Manufacturing Laboratory, and the Artificial Intelligence Art and Design Centre.

These are complemented by an Interdisciplinary Innovation Centre and the Guangdong Industrial Design Exhibition Hall.

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# 广东工业大学艺术与设计学院

广东工业大学艺术与设计学院是我国设计实践和创意产业结合得最好的设计类学院之一。设计学科在2023、2024年“软科中国最好学科”排名全国第五，蝉联“中国顶尖学科”。学院拥有设计学一级学科博士点、设计学一级学科硕士点。学院6个专业获批国家级一流本科专业建设点。近年来软科中国大学最好专业排名中均获设计类专业3个获评A+，其余4个专业为A。

师资队伍方面，学院现有170余名教师，拥有多名国家级高层次人才、国家级课程思政教学名师。学院汇聚了一支高度国际化的专业教师团队，聘有来自英国、澳大利亚、新加坡、芬兰、西班牙、韩国等国的全职和短期外籍教师20余名，每年开设超20门全英文国际工作坊课程。

学院与英国东安格利亚大学开展“视觉传达设计”专业本硕联合培养项目（3+1），与德国柏林媒体设计与计算机应用大学开展“数字媒体技术”专业本科双学位联授项目（3+1），联合培养具有国际设计视野的高素质创新型人才。

学院现有本科生、硕士生、博士生超3300人。师生作品多次入选全国美术作品展览，另斩获iF设计奖、红点设计奖、光华龙腾奖等国内外权威设计奖项数百项。

每年均有大批学子顺利入职华为、腾讯、阿里巴巴、广汽、美的等千亿级龙头企业，众多学子或赴国外一流设计学院留学深造。

学院现有广东国际先进设计中心、大型交通工具设计与制造实验室、人工智能艺术设计中心等核心平台，配备交叉创新中心和广东省工业设计展览馆。

**更多信息请联系：**

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# Artworks

# 艺术作品

# Intangible Cultural Heritage · Sichuan Opera Face-Changing

## Interactive Installation

This interactive installation explores the tradition of Sichuan Opera Face-Changing using a rotating cube decorated with classic Sichuan Opera masks. The device is controlled by a Micro:bit microcontroller, which operates both the motor and an LED light strip.

When the button on the Micro:bit is pressed, a motor rotates the cube to reveal the next mask. At the same time, the LED strip illuminates in the dominant colour of the newly displayed mask, linking the visual transformation with light. Through this simple interactive experience, visitors can explore the cultural tradition of Sichuan Opera while discovering how the Micro:bit can be used to create engaging interactive artworks.

Yuxi Lin  
Shiran Huang  
Peijun Huang  
Yuyan Zhou  
Wanying Chen

School of Art and Design  
Guangdong University of Technology



YouTube

林羽曦  
黄释然  
黄佩君  
周语嫣  
陈婉盈



视频二维码

广东工业大学艺术与设计学院

## 非遗·川剧变脸

### 交互装置

本装置以传承川剧文化为核心，主体为贴有经典川剧脸谱的正方体。由 microbit 主控，搭配按键模块与彩色灯带：按下按钮时，microbit 触发电机带动正方体转动一个面，切换至新脸谱，同时灯带亮起对应脸谱主色，实现“变脸”视觉效果与灯光联动，让传统艺术通过简易交互更易感知。





# Guangxi Zhuang Intelligent Interactive Handmade Bronze Drum

## Interactive Installation

Inspired by the Guangxi Zhuang Bronze Drum, a nationally recognised element of China’s intangible cultural heritage, this interactive artwork draws on traditional decorative motifs including the sun, cloud and thunder, and frog patterns.

By combining these historic symbols with intelligent audio-visual technology, the project reinterprets the bronze drum tradition in a contemporary, interactive form. When visitors tap the sculpture, simulating the performance of a traditional Zhuang bronze drum, or make sounds nearby, the sculpture responds with flowing coloured light. The effect suggests that the bronze drum has come alive, glowing and singing while celebrating the continuing relevance of this ancient cultural tradition.

Liang Zhirui  
Huang Xinying  
Cheng Lixin  
Zhang Rui  
Yi Tanjie

School of Art and Design  
Guangdong University of Technology



YouTube

梁芷睿  
黄欣荧  
程丽欣  
张睿  
艺谭捷



视频二维码

广东工业大学艺术与设计学院

## 广西壮族智能交互手工铜鼓交互装置

聚焦广西壮族铜鼓这一国家级非遗，提取其“太阳纹、云雷纹、蛙纹”等核心文化符号，结合智能声光互动技术，让千年铜鼓文化在当代以“可交互、可感知”的形式焕发生机，打造具有文化传承价值与现代科技感的创新智能手工艺品。





# Yang Jian Cleaved the Mountain to Save His Mother

## Interactive Game Design

Yang Jian Splits the Mountain to Save His Mother is a 2D side-scrolling platform game based on the classic Chinese myth. Its unique artistic style is presented entirely through traditional Chinese shadow puppetry. Players control the silhouette of the young Yang Jian as he navigates the perilous Peach Mountain, wielding his mountain-splitting axe to defeat demons. The goal is to progress through enemy-filled levels, defeat all enemies and the final boss, and rescue his mother. Players move using the A and D keys, jump with the Space bar, perform a basic attack with J, and use a laser attack with K. Each stage features different terrain and enemies. The game is won by defeating all enemies and the final boss, while the game ends if Yang Jian's health reaches zero.

Liu Leting  
Li Meng  
Ou Zhijie  
Chen Runbo  
Lai Junyu

School of Art and Design  
Guangdong University of Technology



YouTube

刘乐婷  
李蒙  
欧智杰  
陈润博  
赖俊宇



视频二维码

广东工业大学艺术与设计学院

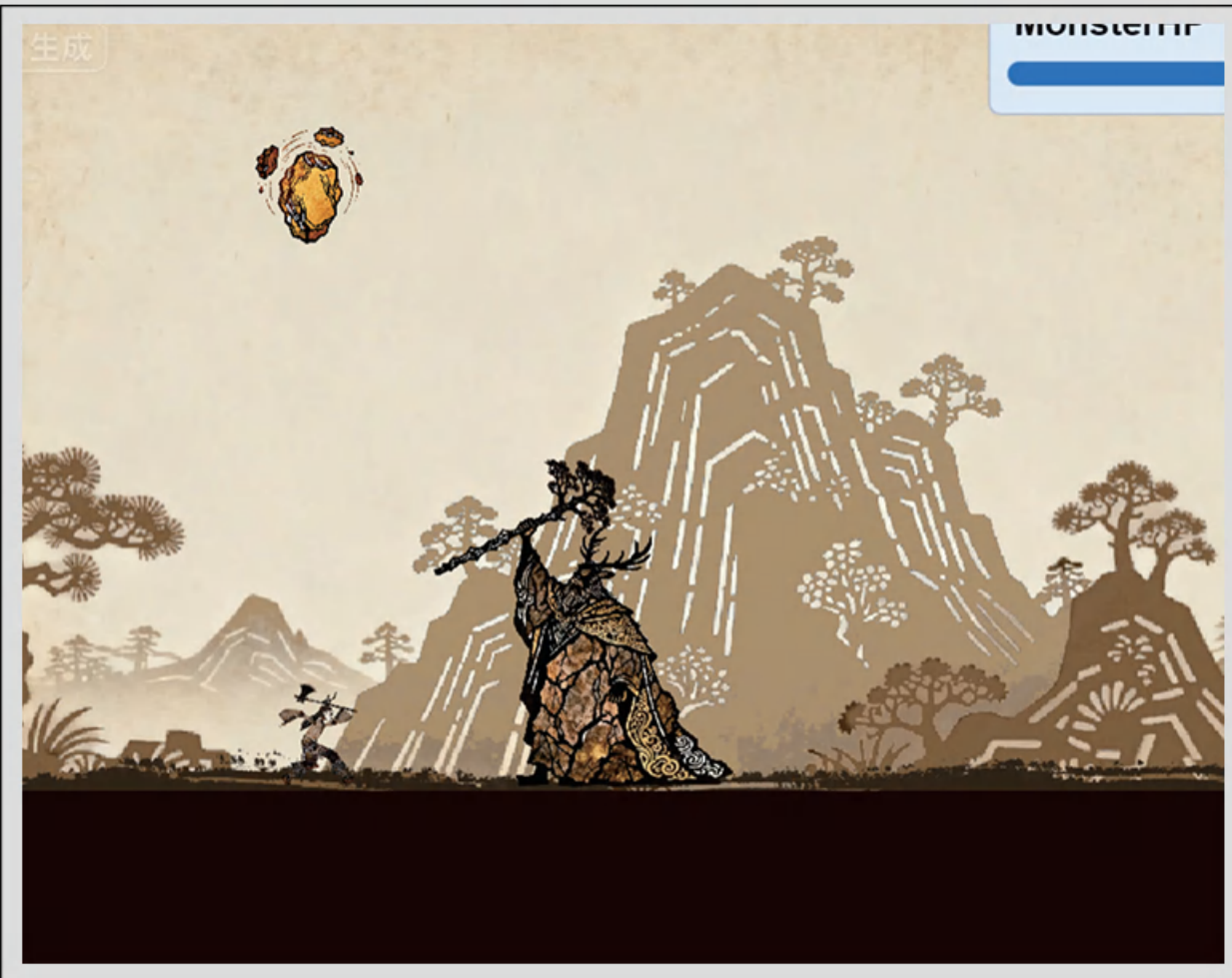
## 杨戬劈山救母

### 交互游戏设计

《杨戬劈山救母》是一款以“劈山救母”神话为蓝本的2D横版 平台跳跃游戏，其特色在于全程采用中国传统皮影戏的艺术 形式进行演绎。玩家将操作剪影风格的少年杨戬，在如同 皮影幕布般的桃山险境中跳跃穿梭，挥动开山斧斩妖除魔。



Yang Jian cleaved the mountain to save his mother



杨戩劈山救母

# Scratch Colorful Puzzle Game

## Interactive Game Design

This is a casual adventure game based on the culture of Guangcai (Cantonese enamelware). Players follow the protagonist, Xiao Jing, as they experience the beauty of this traditional craft while collecting porcelain plate fragments, completing a journey of growth from indifference to inheritance. Created using simple Scratch programming, the game allows players to control Xiao Jing as they move, run, and jump around the scene, avoid simple obstacles, and collect scattered Cantonese enamel plate fragments. The level is completed by assembling the fragments into a finished porcelain plate.

Liang Zhirui  
Huang Xinying  
Cheng Lixin  
Zhang Rui  
Yi Tanjie

School of Art and Design  
Guangdong University of Technology



YouTube

梁芷睿  
黄欣荧  
程丽欣  
张睿  
艺谭捷

广东工业大学艺术与设计学院

# Scratch广彩闯关小游戏

## 交互游戏设计

这是一款以广彩文化为背景的休闲闯关游戏。玩家将跟随主角小景，在收集瓷盘碎片的过程中，体验传统工艺之美，完成从“不屑”到“传承”的成长。



视频二维码



Yang Jian cleaved the mountain to save his mother



Scratch广彩闯关小游戏



# Awaken the Sleeping Chime Bells

## Interactive Installation

As an important symbol of ancient Chinese ritual and musical culture, the bianzhong carries rich cultural meanings related to ceremonial practice, musical performance, social order, and historical memory.

However, in contemporary museums, the bianzhong is often presented as a static exhibit. Its sound, performance techniques, and communal ritual context are largely absent, transforming it into a “silent” musical relic.

Inspired by the Zenghouyi Bianzhong, this project explores how human-computer interaction can revive the sensory experience and cultural significance of these ancient ritual instruments. Using mallets as interactive tools, participants follow visual cues, sound feedback, and digital imagery to collaboratively strike the bells and create an immersive musical experience that connects past and present.

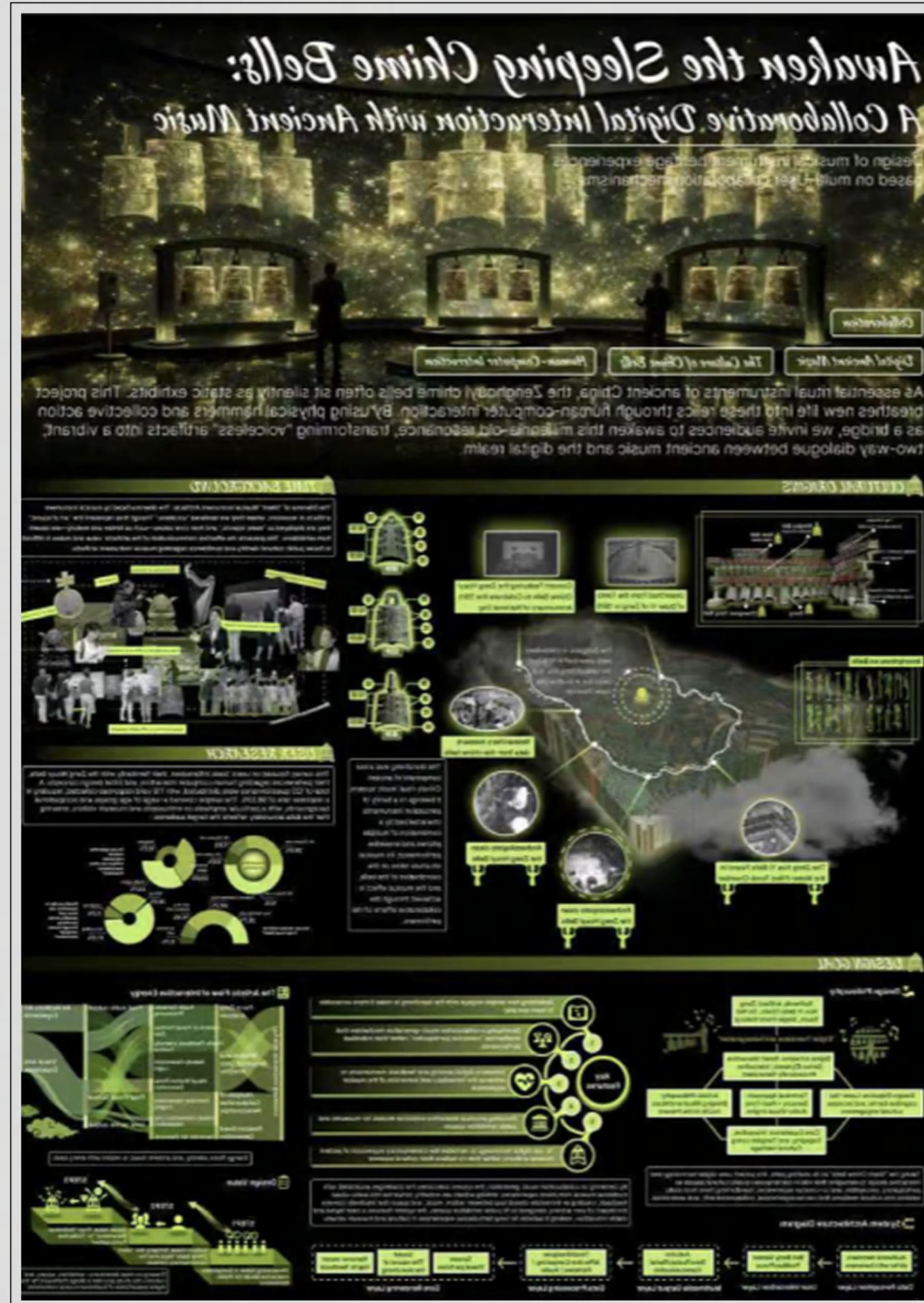
Rather than simply observing cultural artefacts, visitors are invited to awaken the thousand-year-old voices of the bells through collaboration, listening, and interaction. In this way, the project restores vitality to ancient music in a digital environment and creates a dialogue between traditional ritual music culture and contemporary interactive technology.

Li Ximing

Guangdong University  
of Science and Technology



YouTube





# 唤醒沉睡的编钟

## 交互装置

编钟作为中国古代礼乐文明的重要象征，承载着祭祀、礼制、音乐与权力秩序等多重文化内涵。然而在当代博物馆语境中，编钟多以静态陈列的方式被观看，其声音、演奏关系与集体礼乐场景逐渐被弱化，成为某种意义上“失声”的乐器文物。本项目以曾侯乙编钟为文化灵感，尝试通过人机交互技术重新激活古代礼乐器物的感知经验与文化内核。

观众以锤为媒介，在视觉提示、声音反馈与数字影像的引导下共同参与敲击，通过多人协作完成一场跨越时空的古乐互动体验。项目希望让观众不再只是被动观看文物，而是在协作、聆听与回应中“敲醒”千年钟鸣，使失声古乐在数字空间中重焕生机，进一步建立传统礼乐文化与当代数字交互之间的双向对话。

李玺铭

广东工业大学艺术与设计学院



视频二维码



Awaken the Sleeping Chime Bells

解码古代宫廷的声音密码  
Decoding the Sound Codes of Ancient Palaces

2025 11/5  
TouchDesigner x Arduino

长柄甬形·悬挂演奏·音域宽广  
常用于宫廷雅乐主旋律

华夏之音  
三代编钟

聆听千年青铜回响，读懂华夏礼乐文明  
源于商周盛于春秋战国，是礼与乐的完美融合  
Originating in the Shang and Zhou dynasties and flourishing in the Spring and Autumn and Warring States periods, it is the perfect fusion of ritual and music.

甬钟  
Yong Bell

解码古代宫廷的声音密码  
Decoding the Sound Codes of Ancient Palaces

2025 11/5  
TouchDesigner x Arduino

短柄有钮·灵活组编·体积较小  
多与甬钟搭配丰富和声层次

华夏之音  
三代编钟

聆听千年青铜回响，读懂华夏礼乐文明  
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Originating in the Shang and Zhou dynasties and flourishing in the Spring and Autumn and Warring States periods, it is the perfect fusion of ritual and music.

钮钟  
Niu Bell

解码古代宫廷的声音密码  
Decoding the Sound Codes of Ancient Palaces

2025 11/5  
TouchDesigner x Arduino

扁体兽饰·仪式重器·造型华丽  
侧重节奏与装饰，象征权力等级

华夏之音  
三代编钟

聆听千年青铜回响，读懂华夏礼乐文明  
源于商周盛于春秋战国，是礼与乐的完美融合  
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镛钟  
Yong Bell



唤醒沉睡的编钟



# Creation of the Dunhuang Lotus Guardian

## Interactive Installation

This project presents a charming 3D digital avatar inspired by the Dunhuang Flying Deity. Using AI-assisted motion capture, the avatar performs lively and graceful movements while holding a glowing lotus lantern, symbolising the ancient Buddhist practice of “lighting lamps to worship the Buddha” depicted in the Dunhuang murals. Flowing ribbons recreate the elegance and movement characteristic of the grotto paintings.

Designed for VR experiences and digital storytelling, the virtual character makes the thousand-year-old heritage of Dunhuang more approachable and engaging, creating an immersive and contemporary form of cultural interpretation. To extend the character beyond the digital environment, the project also includes a complementary Chinese tea house brand, Yunyi Xiaozhan, allowing the avatar’s identity to become part of a broader lifestyle experience that connects digital creativity with traditional culture.

Yi Yitong

Guangdong University  
of Science and Technology



YouTube

蚁伊彤

广东工业大学艺术与设计学院



视频二维码

## 敦煌莲使 交互艺术设计

本项目以敦煌飞天为灵感，打造了一个生动有趣的3D数字虚拟人。借助AI动作捕捉，它的一举一动灵动飘逸，手持莲花灯，寓意“燃灯供佛”的壁画传统，飘带再现敦煌经典神韵。该形象适用于沉浸式实景游览与数字叙事，以轻松亲切的方式让千年敦煌艺术走近大众，实现沉浸式文化传播。同时，衍生茶饮品牌“云绎小栈”进一步让虚拟形象融入生活，传递传统之美。







# Solarity

## Interactive Installation

Solarity is a creative campaign developed as part of the vision for the Future Sun Service Centre. It raises public awareness of the often-overlooked problem of sunlight deprivation in contemporary society by using augmented reality (AR) to combine immersive virtual experiences, evidence-based scientific guidance, and practical real-world actions.

The project demonstrates how natural sunlight influences circadian rhythms, mood, and overall well-being, while offering accessible and practical ways for people to increase their exposure to daylight. Through AR-enhanced storytelling, users are encouraged to spend more time outdoors, engage in sunlight-friendly activities, and track their progress.

By connecting digital interaction with real-world participation, Solarity not only educates but also encourages positive behavioural change, helping people rediscover the benefits of natural sunlight in their everyday lives.

Yi Yitong

Guangdong University  
of Science and Technology



YouTube

蚁伊彤

广东工业大学艺术与设计学院

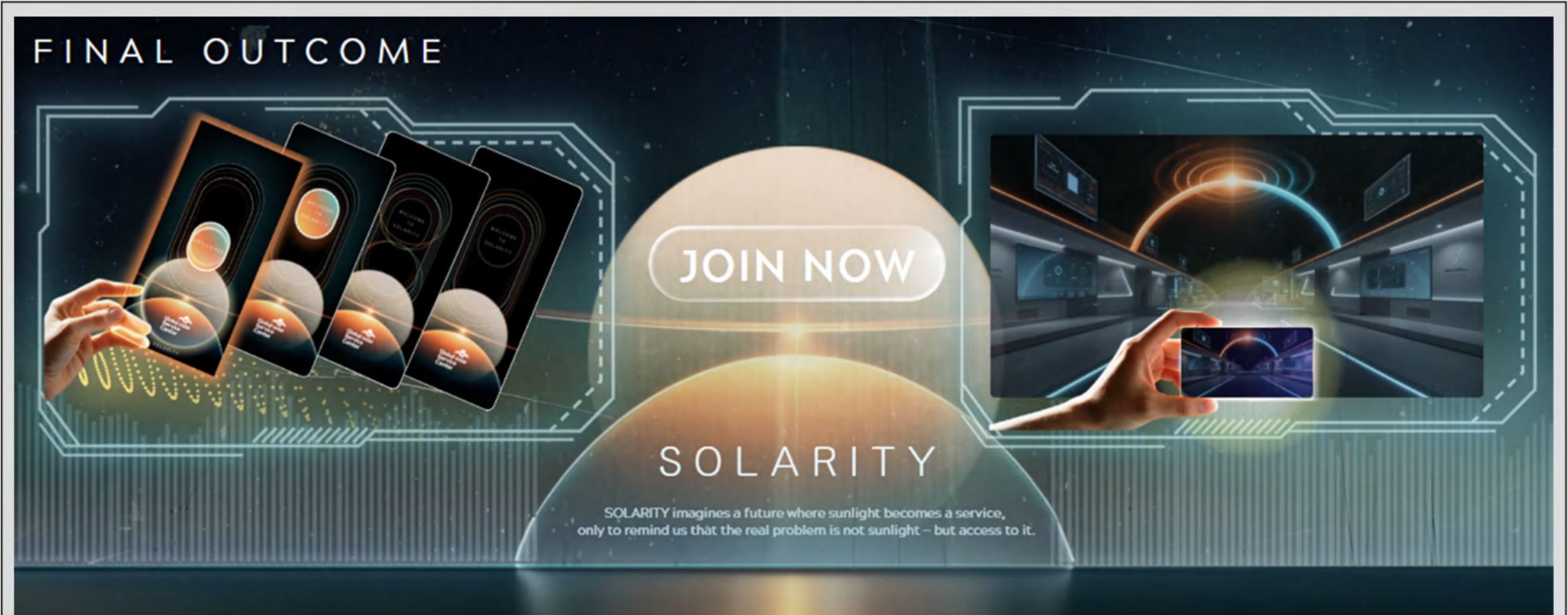


视频二维码

## 未来太阳服务中心

### 交互艺术设计

SOLARITY基于“未来阳光服务中心”理念，针对未来垂直城市的背景，来呼吁公众关注日照不足这一现代隐忧。通过AR技术，打造“虚拟体验—科学引导—真实行动”的完整闭环，直观科普阳光对身心健康的积极作用，引导人们主动拥抱户外阳光，并为日照缺乏引发的健康问题提供温和有效的应对方案。



未来太阳服务中心



# Ancient Grace, Modern Spirit

## Product Design

This creation is a cultural and creative research design developed for the EVA China-UK Exchange Competition, featuring a sandalwood-centered Chinese incense fragrance collection shaped by comprehensive cultural and product comparative research. Adopting a minimalist Chinese aesthetic with low-saturation pale cyan tones, the design integrates orchid and cloud patterns, suitable for diverse occasions including tea rooms and traditional Chinese banquets. The collection consists of five products: aromatherapy diffuser, incense sticks, incense plaques, solid perfume balm and tower incense, among which incense sticks, incense plaques and tower incense are all handcrafted.

Preliminary cultural research on the Four Great Incenses was conducted and compiled into a popular science video.

We took sandalwood—the most widely accepted incense among audiences—as the research entry point to sort out traditional incense culture. Meanwhile, we compared the ingredients of Chinese and Western fragrances, verifying through research that natural Chinese sandalwood emits a mild, non-irritating aroma which is gentler and healthier for the human body than synthetic Western perfume fragrances.

Blending traditional incense-making craftsmanship with modern minimalist aesthetics, this design delivers oriental incense culture to the world through tangible research outcomes. Using scent as a medium, it builds a cultural communication bridge for young people from China and the UK, realizing practical research on the international dissemination of traditional Chinese incense culture.

Lu Meiling  
Lu Jinying

Guangdong University  
of Science and Technology



YouTube





# 古香今韵

## 产品设计

本作是为EVA中英交流赛事文创研究类设计，以檀香为核心打造中式香主题香氛套装，依靠完整文化与品类对比研究完成创作。整体采用低饱和浅青色中式简约视觉，纹样结合了兰花与云纹，可以适配茶室或者中式酒宴等多元场景。该设计系列包含了香薰、线香、香牌、香膏、塔香五款产品，其中线香、香牌、塔香均手工制作。

视频前期开展四大名香文化调研，我们以受众接受度最高的檀香作为研究切口，制作科普视频梳理香道知识的同时，对比中西香氛成分，研究并证实天然中式檀香气味柔和不刺鼻，相较西式香精香氛更益人体。

设计将传统制香工艺与现代简约审美融合，以实物研究成果向外输出东方香文化，借嗅觉载体搭建中英青年文化交流桥梁，完成传统香道文化的海外传播研究实践。

鲁美灵  
卢锦滢

广东工业大学艺术与设计学院



视频二维码





# Mugwort Invites the World

## Interactive Installation

In the Name of Mugwort, An Invitation to the World is a digital art exhibition that combines traditional Chinese mugwort (moxa) culture with art, virtual reality, and elements of traditional Chinese culture. Through a three-stage digital art journey, the exhibition guides visitors from surface understanding to deeper appreciation, and from the tangible to the intangible, blending the virtual and the real to create an immersive experience of the richness of traditional mugwort culture. In doing so, it explores the relationship between humans and plants and the intersection of traditional culture and artificial intelligence.

Wheel of Life uses AI-generated animated videos to demonstrate how mugwort is used in everyday life, providing visitors with an introduction to its history and applications.

Zen Realm of Moxa Aroma invites visitors into an immersive space where they interact with installations guided by video content, gradually exploring the origins of mugwort and its more refined uses.

Cyber Moxa Resonance presents the production process for everyday mugwort products and, alongside a display of physical artefacts, explores the continuity of mugwort culture and its future possibilities.

Through AI-generated content, the exhibition not only preserves traditional knowledge but also opens a dialogue between cultural heritage, contemporary technology, and future development.

**Xiuhui ZHENG**

School of Art and Design  
Guangdong University of Technology  
/  
Guangdong Polytechnic of Industry  
and Commerce







# 以艾之名|邀世相约

## 交互装置

《以艾之名，邀世相约》是一场结合了中医艾草文化、艺术、虚拟现实以及传统文化元素的数字艺术展。展览通过三个阶段的数字艺术展示来由浅入深，由表及里，虚实结合的让体验者沉浸感受中医艾文化的魅力。以此探索人与植物、传统文化与人工智能的融合。

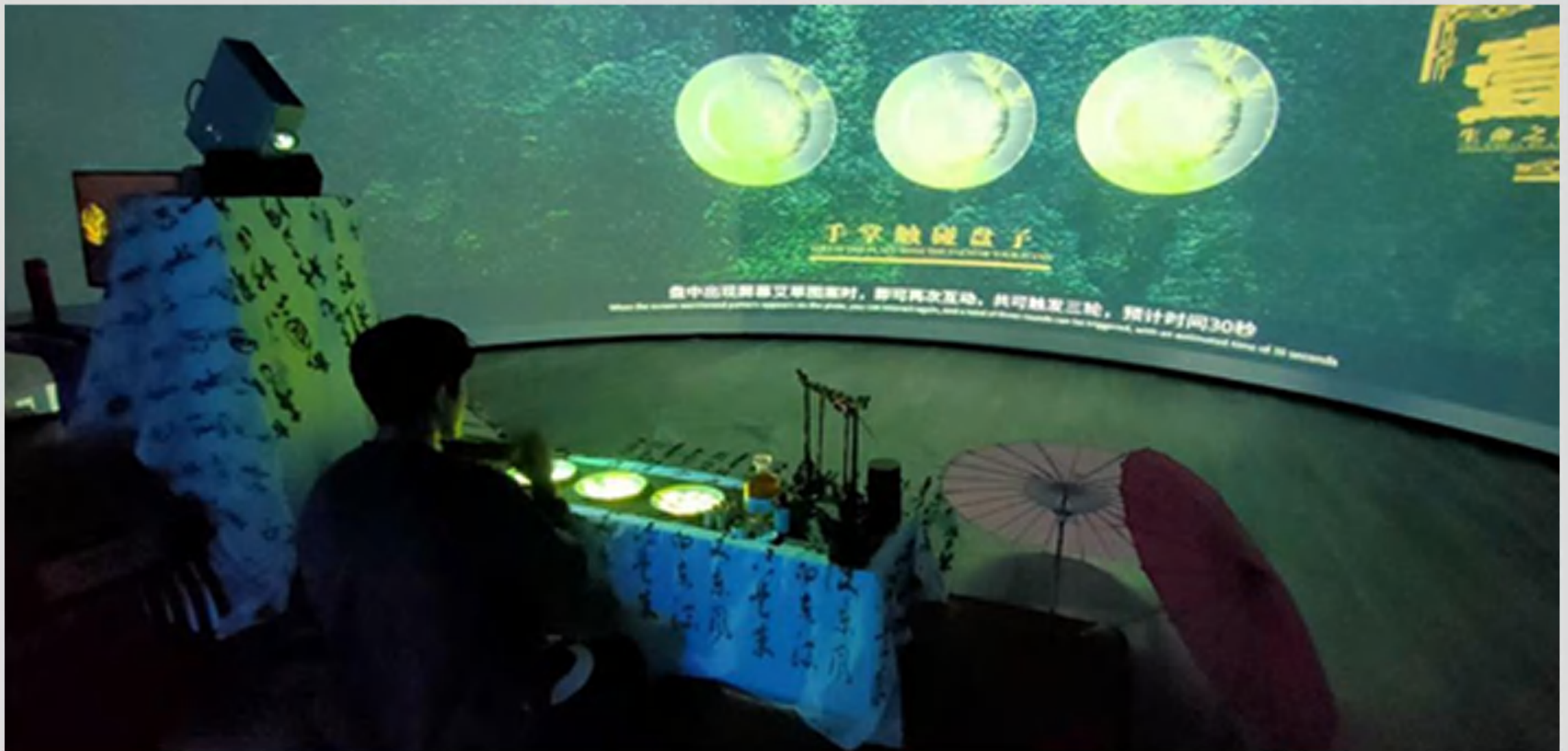
“生命之轮”通过AI绘制艾草在生活中运用的视频动画，让体验者对基本的艾草知识进行初步唤醒。

“艾香禅境”让体验者进入沉浸的空间跟着引导视频内容进行与装置的交互，逐步深入的探索艾草的起源以及艾草更加巧妙的运用。

“赛博交响”将生活中的艾草产品制作流程呈现于观众，再结合实体产品的陈列，探索艾草本质的延续性与在未来产品中的无限可能。通过AIGC，我们不仅传承经典，更开启一场关于传统文化、现代技术与未来发展的深刻对话。

郑秀惠

广东工业大学艺术与设计学院  
/广东工贸职业技术学院





# Liu

## Interactive Light Art Installation

This artwork consists of 1,000 semicircular water-droplet sensor lights. When a visitor approaches a droplet with a light source, it illuminates and rapidly ripples outwards, spreading like a wave. In that moment, your light merges with others' light, creating a shared sea of illumination and consciousness.

The work reflects the constant flow and transformation of life. Everything is in motion, and through this continuous flow we experience the essence of life itself. Inspired by the Taoist principle of “going with the flow”, the installation expresses the endless cycle of change, from “nothing” to “something” and from “something” back to “nothing”, representing the continuous flow of energy between heaven and earth.

GEEKSART

Official Website : [www.geeks-art.com](http://www.geeks-art.com)



YouTube

GEEKSART•极客艺术™

官方网站: [www.geeks-art.com](http://www.geeks-art.com)



视频二维码

# 流

## 互动灯光艺术装置

作品由1000个半弧形的水滴感应灯组成。当我们用光源靠近点亮其中一颗“水滴”，它犹如涟漪一般迅速传递扩散开去，你的光与他人的光在这一刻交融，点亮彼此，流动成意识的海洋。我们的生命是流动着不断变化的，万物皆是一种流动。在流动之中我们感受到生命的本质，它犹如中国传统朴素的道教思想中所说的“顺势而为”的宇宙大道，它是从“无”到“有”，又从“有”到“无”的此消彼长，是天地之间元亨利贞能量流动不息。





# Touching Colors • Peeking Light

## Interactive Lighting Design

Rooted in the traditional arts and crafts of the Lingnan region, this work combines the classic forms of Canton porcelain with the vibrant colours of Lingnan stained glass. Using interactive programming, it reinterprets these traditional materials and aesthetics in a contemporary context.

The intricate decorative patterns of Canton porcelain are enhanced by the light-transmitting qualities of stained glass, creating an installation that balances cultural heritage with technological innovation. The work celebrates the preservation of intangible cultural heritage while exploring new creative possibilities through light, colour, and interaction.

Zhixin Yang  
Yizhi Zhou  
Jlanuo Li  
Yaowen Zhang  
Yuhang Cai

Guangdong University  
of Science and Technology

杨芷欣  
邹宜芝  
李佳诺  
张耀文  
蔡宇航

广东科技学院

## 触彩·窥光 交互灯具设计

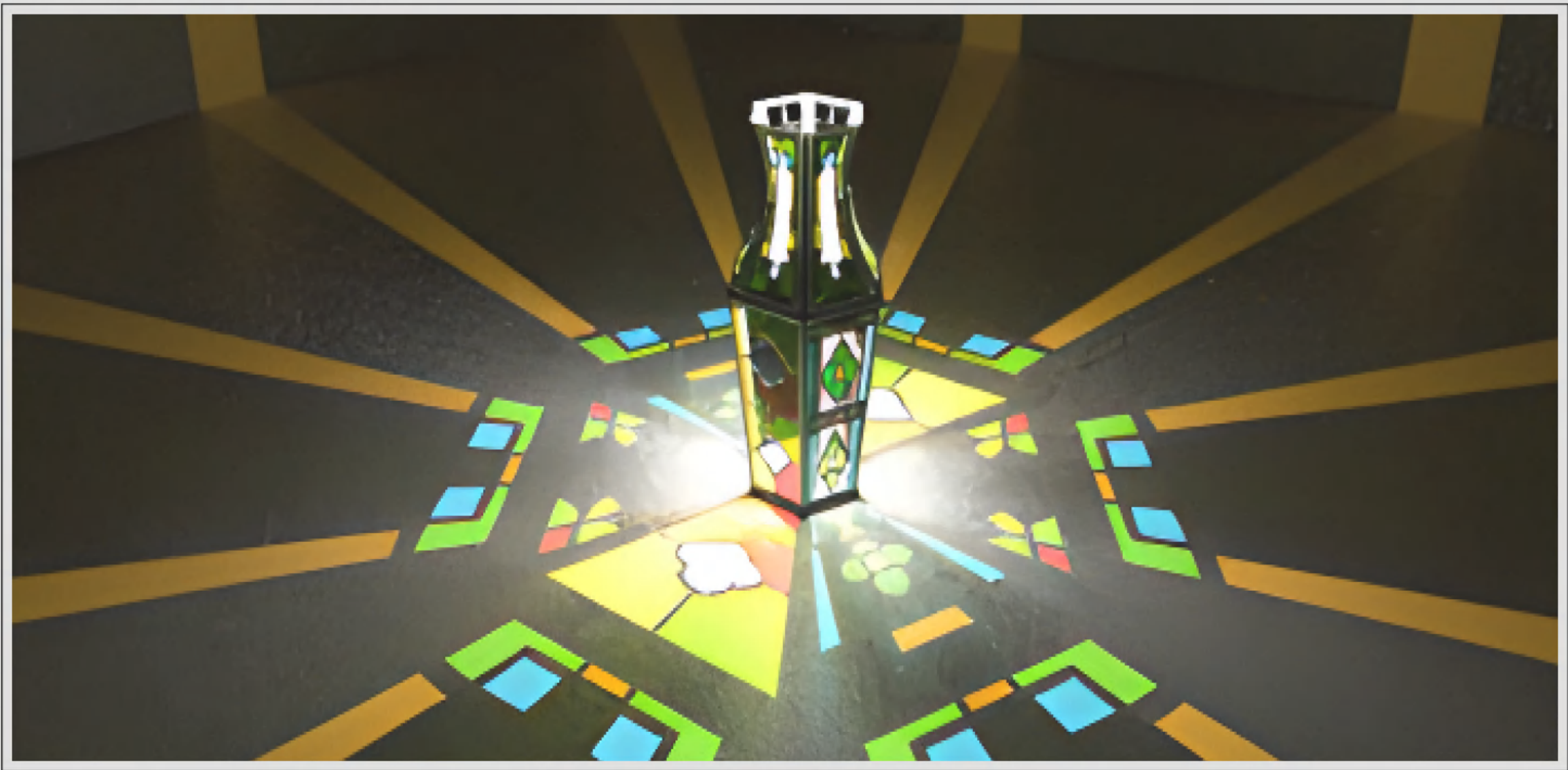
本设计以岭南传统工艺美术为核心深度融合广彩陶瓷的经典器型与岭南彩色玻璃窗的绚丽色彩，通过互动编程技术重新诠释传统美学。广彩陶瓷的繁复纹样与彩色玻璃的透光性相结合，打造兼具文化底蕴与科技感的艺术装置，既是对非遗技艺的传承，亦是对光影艺术的创新探索。



YouTube



视频二维码





# Butterflies Dance among the Flowers

## Interactive Installation

This design is inspired by a round Guangcai porcelain dish from the mid-Qing Dynasty featuring a vibrant butterfly pattern. The graceful butterfly motif serves as the central visual element, paired with the elegant form of a Dan-style bottle and decorated with classic patterns from Qing Dynasty famille rose porcelain. The result is an interactive music-box lamp inspired by the artistic concept of “butterflies awakening to flowers,” symbolising the revival and flourishing of Guangcai porcelain, like flowers blooming in nature. Through interactive technology and optical reflection, the design brings new life to this cultural heritage, creating a dialogue between the virtual and the real.

Cai Ke  
Chen Yucheng  
Feng Qiuchan  
Xu Weiyin  
Zhang Decai

Guangdong University of  
Science and Technology



YouTube

蔡柯  
陈煜城  
凤秋婵  
许蔚茵  
张德财



视频二维码

广东科技学院

## 蝶舞花间·文物新韵

### 交互装置

本设计以清中期广彩花蝶纹圆碟为灵感原型，提取其灵动花蝶纹样作为核心视觉元素，结合胆式瓶的典雅器型，融合多种清代粉彩经典纹饰，打造一款交互式音乐盒灯具。设计以“蝴蝶闻花来”为意境，象征广彩瓷器如花朵般在自然中苏醒绽放，并通过交互技术与光学反射，让文物艺术在虚实之间焕发新生。

# 蝶舞花间·文物新韵

——广彩花蝶纹交互式音乐盒灯具设计

Butterflies dance among the flowers

## 设计说明 DESCRIPTION OF DESIGN

本设计以清中期广彩花蝶纹圆碟为灵感原型，提取其灵动花蝶纹样作为核心视觉元素，结合胆式瓶的典雅器型，融合多种清代粉彩经典纹饰，打造一款交互式音乐盒灯具。设计以“蝴蝶间花来”为意境，象征广彩瓷器如花朵般在自然中苏醒绽放，并通过交互技术与光学反射，让文物艺术在虚实之间焕发新生。

## 设计过程 DESIGN PROCESS

### 1. 主体器型——广彩花蝶纹胆式瓶

造型来源：参考清代胆式瓶的经典形制，线条柔美流畅，腹部圆润饱满，颈部修长挺拔，整体端庄典雅。

材质工艺：采用亚克力板镂空效果。

花蝶纹（清乾隆·粉地粉彩花蝶纹双耳方瓶）：瓶身主体以蝴蝶翩跹、花卉绽放为主题，色彩明艳，展现广彩的富丽风格。

八仙游枝连福寿纹（清乾隆粉地粉彩八仙游枝连福寿纹天球瓶）：在瓶肩处融入游枝连福，并点缀八仙法器，象征吉祥长寿。

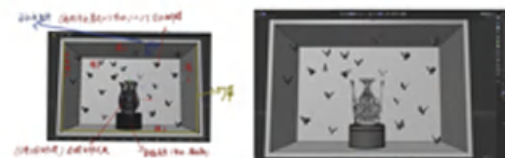
莲花蟠龙纹（粉彩莲花蟠龙纹贯耳瓶）：在瓶颈处加入莲花与蟠龙纹样，增强威严与灵动感。

游枝连福（粉地粉彩游枝连福天球瓶）：作为辅助纹饰，增强画面的连贯性与层次感。



纹饰融合（文物元素提取）

### 2. 整体设计图——交互灯具



### 3. 环境氛围——蝴蝶与光学反射空间

动态蝴蝶装饰：在瓶身周围设计悬浮蝴蝶（亚克力激光雕刻或轻质合金），部分蝴蝶内置微型磁悬浮装置，可随音乐或交互轻微浮动。

玻璃反射增强空间感：周围采用单面镜子，通过光的反射与折射，形成无限延伸的视觉空间，仿佛蝴蝶在花丛中穿梭飞舞，营造“蝶舞花间”的沉浸式体验。



### 4. 材质与工艺

1. 瓶身：高精度亚克力，灯光还原广彩的细腻笔触。

2. 纹饰：数字微喷技术结合局部手绘，确保色彩瑰丽且富有层次。

3. 蝴蝶装饰：亚克力激光雕刻或钛合金电镀，部分连接磁悬浮模块，实现轻盈浮动。

4. 底座：音响系统。

## 交互设计 INTERACTION DESIGN

### 1. 智能感应交互

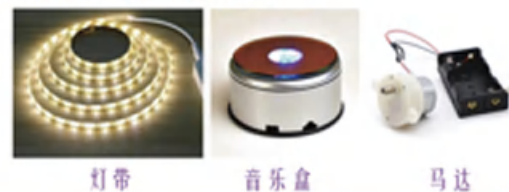
手势/触摸控制：轻触瓶身或挥手感应，即可启动灯光与音乐，蝴蝶随之微微振翅，光影在镜面空间中流转。

### 2. 动态灯光系统

LED智能调光：灯光可模拟晨曦、黄昏、月光等自然光效，透过瓶身使纹饰呈现不同氛围。

### 3. 音乐盒功能

古典乐库：内置传统曲目。



灯带

音乐盒

马达

## 设计亮点 DESIGN HIGHLIGHTS

1. “虚实共生”的光学空间：通过玻璃反射与动态光影，让有限空间呈现无限延伸的视觉艺术。

2. 文物活化叙事：以“蝶恋花”隐喻广彩瓷器的魅力，让静态纹饰在交互中焕发生机。

3. 多感官沉浸体验：视觉（灯光+蝴蝶+反射）、听觉（音乐）、触觉（交互）融合，打造诗意栖居的美学装置。



# Color Rhyme · Light

## Interactive Lighting Design

Inspired by the decorative patterns of Guangcai porcelain, an important tradition of Lingnan culture, this design digitally extracts classic motifs, including Guangcai, bird, landscape, animal, and plant patterns. These elements are deconstructed and recombined to create a contemporary chandelier. Equipped with an infrared sensing module and a colour-changing LED system, the luminaire becomes an interactive light-and-shadow installation that combines cultural heritage with digital technology, promoting Guangcai porcelain culture through an engaging experience.

Wei Yuting  
Zhou Keli  
Li Yurong  
Xiang Junji  
Cai Hongxia

Guangdong University of  
Science and Technology



YouTube

魏钰婷  
周可儿  
李玉蓉  
向军吉  
蔡洪霞

广东科技学院

# 彩韵·光

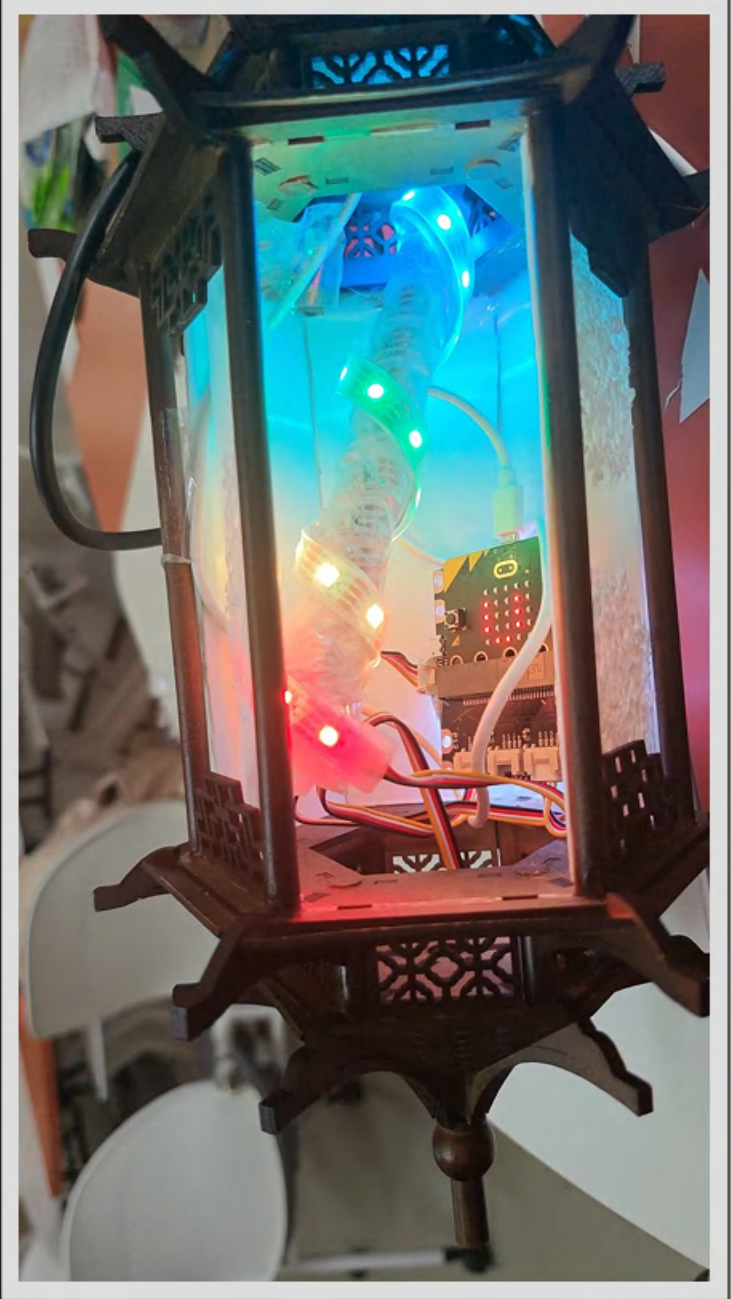
## 交互灯具设计

本设计以岭南传统文化广彩瓷纹样为灵感来源，通过数字化提取经典图案元素——广彩花纹、禽鸟纹、山水纹、动物纹、植物纹，将其解构重组于现代吊灯形态中，灯具内置红外感应模块与可变色温LED系统，打造兼具文化传承与交互体验的数字光影艺术装置，宣扬广彩瓷文化。



视频二维码





彩韵·光



# Metamorphosis

## Interactive Installation

This work takes the spirit of cocoon breaking and butterfly emergence as its central theme, combining three artistic traditions: Western lace, Chinese paper cutting, and ballet, to create a dynamic light and shadow installation.

The transformation from cocoon to butterfly symbolises breaking free from constraints and flourishing through personal growth. It also represents the meeting of Eastern and Western artistic traditions, expressing both cultural exchange and the continuing renewal of intangible cultural heritage. Through the interplay of light and shadow, the installation brings together the delicacy of lace, the vivid forms of paper cutting, and the elegance of ballet to explore themes of transformation, cultural integration, and renewal.

The work celebrates the values of perseverance, self-discovery, and creative innovation, while promoting cultural heritage through an engaging artistic experience. It is suitable for exhibitions of intangible cultural heritage, public art displays, and aesthetic education.

Qi Mingyou  
Zhang Xueyan  
Tang Jiaying  
Wan Weiru  
Huang Xinying



YouTube

Guangdong University of  
Science and Technology







# 蝶变

## 交互装置

本作品以破茧化蝶为精神内核，融合西方蕾丝、中国非遗剪纸与芭蕾舞三大元素，打造动态光影艺术装置。破茧化蝶象征生命挣脱束缚、绽放自我，寓意东西方工艺跨界共生，承载非遗创新传承。作品将蕾丝的细腻、剪纸的灵动、芭蕾的优雅通过光影交织，诠释文化融合与生命蜕变，传递突破自我、蓄力绽放、传承新生的价值理念，兼具艺术观赏性与文化传播性，适用于非遗展览、美育体验等多元场景。

戚茗幼  
张雪妍  
汤嘉荧  
万薇茹  
黄心滢

广东科技学院



视频二维码





# Blue and White Lantern Dance

## • Flower Messages and Sounds

### Interactive Installation

This design is inspired by the Haiyan Rolling Lantern, a nationally recognised element of China's intangible cultural heritage. It combines the culture of the Twelve Flower Deities with Micro:bit interactive technology to create a dynamic installation that bridges traditional culture and contemporary design.

The design extracts the expressive lines of the Twelve Flower Deities and simplifies them into blue and green decorative patterns that are distributed across the lantern's surface. This approach preserves the elegance of the traditional motifs while adapting them to the rolling lantern's movement.

Using the Micro:bit's motion sensor, the installation creates interactive lighting effects. As the lantern rolls, the LEDs produce flowing colour gradients that echo the dynamic movements of the traditional "tiger jump" and "spin". When the lantern is stationary, the lights switch to a gentle breathing effect, evoking the calm, poetic presence of the Flower Deities who protect flowers and trees. By combining traditional craftsmanship with interactive technology, the work demonstrates how digital media can support both the preservation and contemporary interpretation of intangible cultural heritage.

Zheng Xiaoke  
Wu Xiaolei  
Yang Caiyi  
Li Weihong

Guangdong University of  
Science and Technology



YouTube





青花滚灯·花信传声



# 青花滚灯·花信传声

## 交互装置

本设计以国家级非遗“海盐滚灯”为载体，融合十二花神文化与 micro:bit 互动科技,打造兼具文化底蕴与现代感的动态装置。视觉上，提取“十二花信”写意线条，将十二花神简化为蓝绿装饰图案，均匀分布于灯体表面，既保留传统纹样的雅致韵律，又适配滚灯的动态视觉需求。

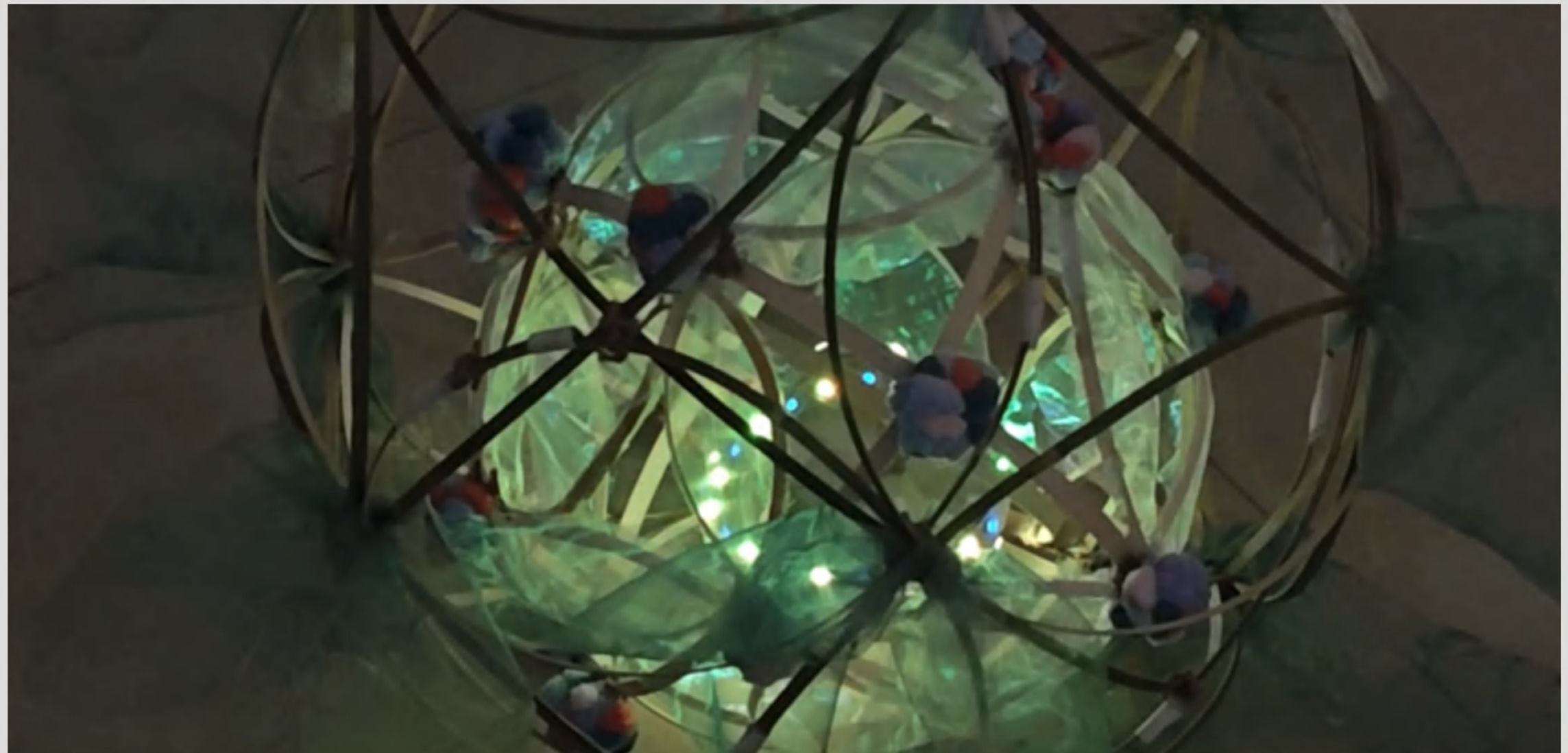
技术上，通过micro:bit姿态传感器实现灯光交互:滚动时LED呈现流水渐变效果，呼应滚灯“虎跳”“旋子”的竞技韵律。静止时切换为柔和呼吸模式，暗合花神护佑花木的静谧:诗意。本设计以科技赋能传统，实现非遗活化与文化传播的双重价值。

郑潇可  
吴晓蕾  
杨彩宜  
李伟宏

广东科技学院



手机扫码观看/分享  
视频二维码





# Floral Crown Star Lantern

## Interactive Installation

This design reinterprets the traditional visual language of Fujian ZanhuaWei, refining characteristic floral motifs such as jasmine while preserving the authenticity of this intangible cultural heritage. Lightweight gauze fabric is layered to recreate the flowers' soft, clustered forms, capturing their delicate texture and depth.

Moving beyond a static display, the installation incorporates warm-toned LED lighting, bringing the floral forms to life through dynamic light and shadow. Rooted in traditional craftsmanship and enhanced by digital media technology, the work allows the warmth of handmade techniques to coexist with contemporary interactive design, giving Fujian ZanhuaWei new vitality in the changing flow of light and shadow.

Li Zhuocong  
Xiao Zemin  
Xian Guanyuan  
Chen Hongzhen  
Chen Ying

Guangdong University of  
Science and Technology

李卓聪  
肖泽铭  
冼观垵  
陈泓蓁  
陈莹

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## 花冕星灯

### 交互灯具设计

本设计解构传统福建簪花围视觉符号，提炼素馨花、茉莉花等核心花卉元素，保留非遗本真。选用轻盈纱质面料，通过多层次叠加，模拟繁花簇拥的柔美层次。打破静态美学，内置暖色调LED灯带，以动态光影赋予“繁花”生机。设计以传统手工艺为根基，融合数字媒体技术，让手工温度与现代技术共生，使福建簪花围这一非遗文化，在光影流转中焕发新时代生命力



YouTube



视频二维码



# 花冕星灯

## 设计说明 Design description

本作品为了一件融合福建非遗簪花围与可编程智能灯带的可穿戴艺术装置，以“传统美学×数字科技”为核心创作理念，通过手工布艺与电子编程的跨界结合，探索非遗文化在数字时代的年轻化表达与交互可能性。作品包含繁花头饰与亮片互动手套两部分，整体呈现温柔梦幻的春日氛围，同时具备动态光影交互功能。

## 三视图 Three views



侧面

正面

背面

## 灵感来源 Inspiration

文化根源：灵感源自福建泉州、福州的非遗簪花围习俗，以繁花簇拥的形态承载“花开富贵、生生不息”的寓意，是闽南女性文化与地域美学的典型符号。  
科技赋能：结合数媒专业背景，引入micro:bit主控板与可编程灯带，将静态传统头饰升级为可交互动态装置，让非遗在光影变化中焕发新生，实现“古典意象与数字未来”的对话。



## 产品图 Product



## 设计草图 Sketch



## 材质 Material



## 夜光图 Noctilucent



## 应用场景/效果图





# Amidst the Dunhuang Drums

## Interactive Light Art Installation

This work takes the Dunhuang Waist Drum, a nationally recognised element of China's intangible cultural heritage, as its central inspiration. Drawing on its cultural origins in the murals of the Mogao Grottoes at Dunhuang, the installation uses Micro:bit IoT technology to create a dual interactive experience that combines “drumming to control lights” with “ringing to illuminate”.

By transforming the music, dance, and cultural traditions of Dunhuang into an interactive artwork, the installation reinterprets a thousand-year-old heritage through contemporary technology. It creates a dialogue between tradition and modernity, demonstrating how intangible cultural heritage and digital technology can coexist and enrich one another.

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## 敦煌鼓语间

### 互动灯光艺术装置

作品由1000个半弧形的水滴感应灯组成。当我们用光源靠近点亮其中一颗“水滴”，它犹如涟漪一般迅速传递扩散开去，你的光与他人的光在这一刻交融，点亮彼此，流动成意识的海洋。我们的生命是流动着不断变化的，万物皆是一种流动。在流动之中我们感受到生命的本质，它犹如中国传统朴素的道教思想中所说的“顺势而为”的宇宙大道，它是从“无”到“有”，又从“有”到“无”的此消彼长，是天地之间元亨利贞能量流动不息。



YouTube



视频二维码







# Nuo Opera Mask

## Interactive Installation

This work uses traditional Nuo Opera Masks as its cultural inspiration, combining them with modern interactive technology to create an innovative fusion of intangible cultural heritage and digital art. The central facial area of the mask is produced using 3D printing technology, accurately reproducing the bold textures and expressive features that characterise traditional Nuo opera masks. The outer structure is assembled from modular cardboard components, creating a striking geometric form that reduces weight, improves comfort when worn, and reinterprets the visual power of the traditional mask through a contemporary design language.

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Hu Ruikang  
Lu Jingchao  
Zeng Zhicong  
Huang Zhengran

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YouTube

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## 傩戏面具

### 交互灯具设计

本作品以传统傩戏面具为文化载体，融合现代交互科技，实现非遗文化与数字艺术的创新性融合。在材料与工艺上，面具核心面部采用3D打印技术高精度复刻傩戏面具的威严肌理与夸张神态，还原传统“脸子”的文化符号；外部以硬纸板进行模块化拼接，塑造棱角分明的几何轮廓，既减轻整体重量、提升佩戴舒适度，又以当代设计语言重构傩面具的视觉张力。



视频二维码



# 傩戏面具

## 设计说明

本作品以传统傩戏面具为文化载体，融合现代交互科技，实现非遗文化与数字艺术的创新性融合。

在材料与工艺上，面具核心面部采用3D打印技术高精度复刻傩戏面具，外部以硬纸板进行模块化拼接，塑造棱角分明的几何轮廓，既减轻整体重量、提升佩戴舒适度，又以当代设计语言重构傩面具的视觉张力。

## 面具类型



獠牙相



和善相



正神类



欢喜相



凶神类



世俗类



## 设计过程



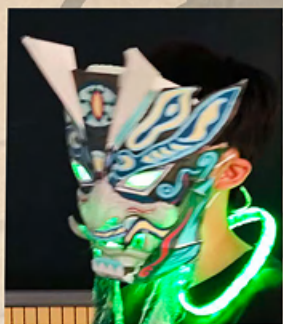




## 交互方式

交互功能上，内置姿态传感器与LED灯带系统：当佩戴者左右摇头时，传感器捕捉动作信号，触发沿脸颊至后颈的灯带流动光效，模拟傩戏表演中“神动”的韵律感；嘴部区域配备独立呼吸灯模块，随佩戴者呼吸节奏明暗交替，赋予面具生命感，强化人与面具的情感联结。











# Workshops

# 工作坊



## Smart Craft Innovation Workshop

The establishment of the Smart Craft Innovation Workshop embodies the practical implementation of China's emerging engineering development strategy rooted in Lingnan cultural characteristics. Successfully held consecutively at Guangdong University of Technology (GDUT) and Guangdong University of Science and Technology (GDUST), the workshop runs twice annually and is open to all students of the School of Art and Design. Since its launch, the workshop's teaching content, practical system and educational outcomes have won unanimous recognition and high praise from the university faculty, administrative departments and participating students. Boasting abundant outstanding teaching achievements, the workshop has selected and included a number of representative excellent works in the portfolio for centralized display. These exemplary creations not only witness the fruitful teaching practice of the workshop,

but also symbolise its continuous development, capability improvement, and growing recognition from universities and all sectors of society.

initiated by the School of Art and Design in 2017, the workshop takes Guangcai porcelain, a quintessential traditional Lingnan craft and intangible cultural heritage, as its core entry point, building an interdisciplinary curriculum system featuring "traditional craftsmanship + intelligent interaction". The innovative educational model of "upholding traditions while pursuing innovation" effectively responds to the national strategic requirement of enhancing "cultural confidence", and perfectly aligns with the talent cultivation orientation of fostering interdisciplinary "design + technology" professionals proposed in the national "Made in China 2025" strategy. As a precious cultural symbol of Lingnan region, Guangcai porcelain carries profound historical heritage and unique cultural connotations. Through

the in-depth integration of traditional Guangcai porcelain craftsmanship and modern intelligent interaction technology, the workshop realizes the digital transformation and innovative inheritance of traditional crafts, and builds a diversified innovation practice platform to broaden students' creative exploration space.

Centering on Guangcai porcelain as its core cultural carrier, the Smart Craft Innovation Workshop explores sustainable innovative development paths for traditional crafts in the digital era. By deeply integrating intangible cultural heritage craftsmanship with cutting-edge intelligent interaction technologies, the workshop guides students to inherit traditional cultural genes on the basis of in-depth cultural cognition, and create innovative artworks and design products that balance practical functionality and aesthetic value.

Co-developed and co-optimised with international professor Sean Clark, the workshop's systematic curriculum adopts Scratch graphical programming and BBC

Scratch graphical programming and BBC Micro:bit hardware development technologies to build a progressive, layered learning path from cultural cognition and theoretical learning to technical practice and innovative creation. For instance, students independently design and develop interactive Guangcai porcelain lamps through programming, transforming classic traditional Guangcai patterns into dynamic interactive light and shadow installations, and realizing two-way empowerment and integrated development of cultural inheritance and technological innovation. This distinctive teaching model effectively remedies the homogenisation and single-dimensionality of traditional craft teaching content, providing students with a professional interdisciplinary innovation experimental field. After systematically learning the historical origin, cultural implication and traditional technological processes of Guangcai porcelain, students apply sensor technology, programming design and other modern technical means to develop intelligent



interactive lamps and other innovative works, comprehensively improving their practical technical capabilities while strengthening their cultural identity and cultural confidence.

Adopting the mature STEAM education framework as its core theoretical foundation, the workshop systematically integrates multidisciplinary knowledge covering digital media art, intelligent interaction design, traditional craft culture and engineering technology. The curriculum not only enables students to comprehensively master the historical background, technological standards and cultural connotations of Guangcai porcelain, but also helps them proficiently grasp the core principles and practical skills of intelligent interaction design, including human-computer interaction logic, sensor application technology and graphical programming technology. Supported by an online-offline hybrid teaching model, the workshop fully leverages internet educational resources and online teaching platforms to build a

dynamically updated, open and shared curriculum resource library, which accurately meets students' personalized, diversified and progressive learning needs. In practical teaching, students first complete the basic learning of Scratch graphical programming through online courses, then combine the unique cultural symbols and artistic characteristics of Guangcai porcelain to design and develop personalized interactive digital installations, realising the thorough internalisation and innovative application of theoretical knowledge.

### **1. Design Practice: From Cultural Inheritance to Innovative Expression**

The design practice module adheres to the integration of theory and practice, realising the seamless connection between cultural inheritance and innovative design. Taking Guangcai porcelain as the core cultural carrier, students combine modern intelligent interaction technology to create original innovative products with distinctive Lingnan cultural characteristics, complete practical functions and high aesthetic value.

In the practical sessions, students apply BBC Micro:bit hardware development, 3D printing and other advanced technologies to innovate and reconstruct traditional Guangcai porcelain patterns and craftsmanship, developing diversified innovative works such as interactive intelligent lamps and smart cultural and creative devices. The curriculum adopts the project-based learning (PBL) teaching model, which drives students to continuously iterate design concepts, optimize scheme details and solve practical technical and design problems in the process of completing complete design projects. This teaching method effectively cultivates students' complex problem-solving ability, interdisciplinary integration thinking and innovative creation capability, and inspires their creative vitality through in-depth cultural reflection and hands-on technical practice.

## 2. Industry Integration: Capability

**Advancement Driven by Real-World Scenarios** The workshop builds a high-quality "industry-university-research" integrated practical platform through long-term in-depth cooperation with enterprises in the cultural and creative, digital design and intelligent manufacturing industries. Students are fully involved in the whole industrial chain practice from early design demonstration, three-dimensional modeling and scheme optimisation to product prototype production, market adaptation evaluation and offline promotion, completing the full-process training from conceptual design to market-oriented product landing. The "learning by doing, practicing by researching" teaching mechanism enables students' design achievements to integrate profound cultural connotations and excellent market competitiveness. Meanwhile, students accumulate rich real industrial project experience, laying a solid foundation for their subsequent professional growth and career development in the field of digital design and cultural innovation.



### **3. Internationalised Teaching: Global Vision and Local Expression**

The internationalized teaching module focuses on breaking disciplinary and geographical boundaries, cultivating students' global design vision, standardized international design language and cross-cultural communication and cooperation capabilities through bilingual teaching courses and transnational collaborative design projects. Students actively participate in high-end international cooperation platforms such as the Asia Design Alliance, carrying out joint design and academic exchanges with international artists and foreign professors around the core theme of innovative development of Guangcai porcelain craft. In cross-border cooperative projects,

### **4. Diversified Evaluation: Fostering All-round Development**

The workshop constructs a scientific, standardized and multi-subject diversified evaluation system for talent cultivation. It adopts a composite evaluation mechanism that combines whole-process process-based assessment (including project progress tracking, team collaboration performance, learning attitude and innovative exploration) and comprehensive outcome-based assessment (including work exhibition results, professional evaluation and market feedback). The evaluation participants cover enterprise industry mentors, international professional teachers and student self-evaluation, which ensures the objectivity, comprehensiveness and professionalism of the evaluation results. The diversified assessment mechanism guides students to continuously summarize experience, reflect on deficiencies and optimize innovative ideas in practice, promoting their all-round and personalized development.

With the unique "theory-practice-industry-international" four-in-one integrated curriculum structure, the Smart Craft Innovation Workshop realizes full-chain and systematic talent cultivation from knowledge imparting, skill training to comprehensive capability improvement. After systematic training, students not only master solid interdisciplinary professional knowledge and practical technical abilities, but also shape profound cultural literacy and broad global vision under the dual empowerment of traditional cultural inheritance and international academic exchange. The workshop has cultivated a large number of high-quality interdisciplinary innovative talents who are competent for digital media art design, traditional craft innovative inheritance and cross-border design research, and its educational brand influence is constantly expanding in universities and society.

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**WeChat Official Account:** International Lab for  
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# 智能手工艺创新工作坊

智能手工艺创新工作坊的创办，是国家新工科建设战略依托岭南地域文化落地实施的重要实践成果。工作坊长期在广东工业大学（GDUT）、广东科技学院（GDUST）常态化连续举办，每年开展两期教学实践，面向学校艺术与设计学院全体学生开放。自运营以来，工作坊的教学体系、课程内容与育人成果获得了校方各级部门的高度认可，以及全体参训学生的一致好评，积累了丰硕的优质教学成果。本次作品集专门遴选收录了一批工作坊的代表性优秀作品进行集中展示，这些精品成果既是工作坊教学实践成效的直观体现，也充分印证了智能手工艺创新工作坊正持续迭代升级、稳步高质量发展，逐步获得更多高校业界与社会各界的广泛认可，行业影响力与育人价值不断提升。本工作坊由广东工业大学艺术与设计学院于2017年发起创办，以岭南非遗经典工艺——广彩瓷为核心切入点，搭建起“传统技艺+智能交互”的跨学科融合课程体系。这套“守正创新、融技于艺”的育人模式，既精准响应了国家增强文化自信、推动传统文化创新性发展的战略部署，也深度契合《中国制造2025》中培育“设计+科技”复合型创新人才的核心培养目标。广彩瓷作为岭南文化的核心载体之一，积淀了数百年的历史底蕴与独特的艺术文化内涵。工作坊通过将传统广彩瓷非遗技艺与现代智能交互技术深度

融合，成功实现了传统手工艺的数字化转型与现代化创新传承，为高校艺术类学生搭建了兼具专业性、创新性与实践性的创作探索平台。

工作坊始终以广彩瓷为核心文化载体，深耕数字时代传统手工艺的创新发展路径。依托非遗技艺与智能科技的深度融合教学模式，引导学生在深耕传统、传承文化基因的基础上，创作兼具实用功能、艺术审美与时代特色的创新设计作品。课程联合国际教授肖恩·克拉克共同研发打磨，引入Scratch图形化编程、BBC Micro:bit硬件开发前沿技术，构建从文化认知、理论学习到技术实操、创新创作的阶梯式进阶教学体系。学生可通过自主编程设计交互式广彩瓷灯具，将古朴经典的广彩传统纹样转化为动态光影交互装置，真正实现文化遗产与科技赋能的双向赋能、共生发展。

该创新教学模式有效破解了传统手工艺教学内容同质化、形式单一、创新性不足的行业痛点，为高校跨学科创新人才培养提供了优质的实践载体与实验场域。学生在系统研习广彩瓷历史渊源、文化内涵与传统工艺流程的基础上，结合传感器应用、智能编程等现代技术，自主设计研发智能交互灯具及各类文创智能装置。双向融合的创新教学模式，既全方位锤炼了学生的现代技术应用能力与创新设计能力，



也让学生在深耕本土文化的过程中筑牢文化认同、厚植文化自信。

工作坊以STEAM创新教育框架为核心理论支撑，系统整合数字媒体艺术、智能交互设计、传统手工艺、工程技术等多学科交叉知识，构建系统化、复合型的课程体系。教学内容不仅覆盖广彩瓷的历史脉络、工艺技法、文化价值等传统文化知识，还聚焦智能交互设计核心能力培养，让学生熟练掌握人机交互逻辑、传感器应用、图形化编程等核心技术原理与实操技能。课程采用线上线下混合式教学模式，整合优质互联网教学资源与线上教学平台，搭建动态更新、资源共享的课程资源库，精准适配不同基础学生的个性化、分层化学习需求。学生通过线上自主学习编程基础理论知识，线下结合广彩瓷特色文化符号开展交互式数字装置设计创作，实现理论知识的深度内化与创新应用。

### 1. 设计实践：从文化传承到创新表达

设计实践部分强调理论与实践的无缝衔接。学生以广彩瓷为文化载体，结合智能交互技术，设计并制作具有功能性和文化价值的创新产品。例如，学生通过Micro:bit硬件开发与3D打印技术，将传统纹样转化为交互式灯具或智能装置。

课程引入项目制学习（PBL）模式，学生在完成作品的过程中不断迭代设计思路，提升解决复杂问题的能力，培养学生的跨学科整合能力，还通过文化反思与技术实践，激发他们的创新思维。

### 2. 产业对接：真实场景驱动能力进阶

工作坊通过与企业的深度合作，构建“产学研”一体化的实践平台。学生参与从设计建模到产品落地的全流程实践，完成从概念设计到市场推广的完整链条。这种“学中做、做中学”的模式，使学生的设计成果兼具文化价值与市场竞争力，同时积累真实项目经验，为未来职业发展奠定基础。

### 3. 国际化教学：全球视野与本土表达

国际化教学部分通过双语课程与跨国合作项目，培养学生的全球设计语言与跨文化沟通能力。学生参与“亚洲设计联盟”等国际合作项目，与国际艺术家、国际教授共同完成广彩瓷主题的智能产品设计。例如，学生通过双语设计报告与国际团队协作，将岭南文化元素融入全球市场语境，实现“本土表达、全球传播”的设计目标。

#### 4.多元评价：促进全面发展

工作坊构建多主体、多元化评价体系，通过过程性评价（如项目进度、团队协作）与结果性评价（如作品展示、市场反馈）相结合，全面衡量学生的综合素养。评价主体涵盖企业导师、国际教师与学生自评，确保评价结果的客观性与科学性，帮助学生在实践中不断反思与成长。通过“理论-实践-产业-国际”四位一体的课程结构，智能手工艺创新工作坊实现了从知识传授到能力进阶的全链条培养。学生不仅掌握跨学科知识与技术能力，更通过文化传承与全球视野的双重赋能，成为能够在数字媒体艺术领域引领创新的高素质复合型人才。

#### 纪毅

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## 致谢

本出版物的顺利付梓，凝聚着多方的关怀与助力。首先要向广东工业大学艺术与设计学院致以最诚挚的感谢——学院领导高瞻远瞩的学术支持、师生群体开放包容的学术氛围，为编写工作奠定了坚实的基础。尤其要特别感谢几位为本书的出版倾注心血的师者与同仁：罗胜京书记、汤晓颖教授、李秀红老师，卢烨诗同学、张倩怡同学、陈奕萱同学展现出高度的责任心与执行力。正是各位以严谨的治学态度与无私的协作精神，为本书的质量与呈现注入了关键力量。此外，还要感谢EVA London委员会的持续支持，其专业平台为我们的研究提供了宝贵的交流契机与资源支撑，这份助力不仅推动了中西合作的落地，更深化了我们在相关领域的相互了解与探索。





*Creative Connections II: Art, Technology and Innovation* by Yi Ji and Sean Clark presents a collection of digital artworks and projects by artists and students in the School of Art and Design at Guangdong University of Technology. It also includes additional works by colleges and collaborators from other institutions in China. Much of the work has been exhibited and presented at EVA London in the UK as part of their ongoing involvement in this annual BCS conference.

《创意联结 II：艺术、技术与创新》由纪毅与肖恩·克拉克合著，书中呈现了广东工业大学艺术与设计学院艺术家及学生创作的一系列数字艺术作品与项目。此外，书中还收录了中国其他院校及合作机构的优秀作品。其中大部分作品在英国 EVA 伦敦会议艺术作品展中展出，成为英国计算机协会年度会议学术活动的一个重要组成部分。

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