

BEYOND THE SINGULARITY

過化存神

2024.03.16 —→ 04.07

12:00 - 19:00

逢星期一休館

CLOSED ON MONDAYS

展藝館 SHOWCASE

黃竹坑業勤街39號

LANDMARK SOUTH 地下高層

UG/F, LANDMARK SOUTH

39 YIP KAN STREET, WONG CHUK HANG

BEYOND
THE
SINGULARITY



香港藝術發展局
Hong Kong Arts Development Council

ARTS · TECH

Exhibition

2.0

藝術 · 科技
展覽

CURATORIAL STATEMENT 策展論

人工智能科技 (AI) 近年高速發展，為人類社會帶來重大變革，其影響力之巨堪比互聯網誕生及工業革命崛起。「過化存神」(*Beyond the Singularity*) 以人工智能的多變和複雜性為敘事核心，突顯其現世影響和未來巨大潛力，同時提出人工智能在倫理、社會、經濟和法規層面所引起的巨大波瀾。作為香港首個匯聚不同藝術家運用人工智能進行全新創作的展覽，本項目旨在建立技術應用的基準，在人工智能日漸滲透藝術領域的時代背景下，探索人機協作的最佳方式。

本展覽以「過化存神」為題，取材自傑克·丹恩 (Jack Dann) 和加德納·多佐伊斯 (Gardner Dozois) 所編輯的科幻故事選集。該書收錄了1960年至2004年間出版的文本，展望未來超智能系統進步至人類無法觸及的高度，對文明掀起一場難以預計的變革。「奇點」(singularity) 一詞最初由阿爾伯特·愛因斯坦 (Albert Einstein) 於1915年提出，用以描述黑洞中心具無限密度和重力的特性。隨後，此概念獲數學家約翰·馮紐曼 (John von Neumann) 採用，再經科幻作家弗諾·文奇 (Vernor Vinge) 普及，假設未來當人工智能的自我進化臻至無限，將引發何等前所未見的變革。2005年，電腦科學家兼未來學家雷蒙·庫茲維爾 (Ray Kurzweil) 在其著作中亦引用了「奇點」一詞，預測電腦智能將在2045年超越人類，在各個領域發動人類目前無法想像或預料的突破。

在2024年的今天，「奇點」這一概念已超越科幻小說的臆想，逐漸成為可能的現實。人工智能的發展速度驚人，不久的將來會在醫療、金融、交通和娛樂等各個領域中廣泛應用，挑戰傳統標準。人工智能顛覆了工作的性質、安全性和人類認知，它的存在引起了不少重大議題，包括工作崗位取替、資訊隱私及倫理決策能力等。例如，人工智能自動化具備可長時間工作、免於患病以及毋需支薪等優勢，會成為許多行業的勞動力來源。隨着人類步入電子時代，數

The swift advancement of artificial intelligence (AI) in recent years signifies a paradigm shift as transformative as the invention of the internet or the industrial revolution. *Beyond the Singularity* embarks on an exploration of this dynamic and complex narrative of AI, highlighting its current implications for its profound potential and the significant ethical, societal, economic and regulatory challenges it introduces. As the first comprehensive exhibition in Hong Kong where diverse artists employ AI tools to create entirely new works, this project aspires to establish a benchmark in AI technology usage while simultaneously questioning the role and relevance of humanity in the context of the advancing integration of intelligent machine within the realm of art.

The exhibition, titled *Beyond the Singularity*, draws inspiration from a science fiction anthology edited by Jack Dann and Gardner Dozois. Featuring stories published between 1960 and 2004, this book presents a vision of tomorrow, particularly in how super-intelligent systems will have advanced to the point that they result in unforeseeable changes to human civilisation. The term "singularity" was initially introduced by Albert Einstein in 1915 to describe the centre of a black hole characterised by infinite density and gravity. It was then adopted by mathematician John von Neumann and popularised by science fiction author Vernor Vinge to designate a hypothetical future when AI advancements reach an infinite self-improvement loop, leading to unprecedented changes. In 2005, computer scientist and futurist Ray Kurzweil incorporated the term "singularity" in his book, predicting that computers will surpass the cognitive abilities of humans by 2045, resulting in breakthroughs in various fields in a manner that humans cannot currently comprehend or predict.

Here and now in 2024, the concept of reaching the "singularity" has evolved beyond a mere figment of science fiction imagination; it is becoming a plausible future outcome. The pace of AI development is accelerating at breakneck speed, and the future integration of AI across various sectors, including healthcare, finance, transportation and entertainment, challenges conventional frameworks in numerous fields. As AI redefines the nature of work, security and human cognition, it raises critical questions about job displacement, data privacy and the ethical decision-making capability implied by AI. For instance, AI automation, with its capacity for relentless work, being free from illness, and not demanding wages, is well-equipped to become the workforce in numerous industries. As we step into an era where digital data increasingly permeates every aspect of our lives, we find ourselves, both willingly and unavoidably, gearing up for major societal transformations in the decades ahead.

BEYOND

碼資料滲透了生活每個角落，我們無可避免要為未來幾十年的龐大社會變革未雨綢繆。

人工智能不僅影響我們的日常生活，亦徹底重塑了藝術的面貌。人工智能為藝術家提供了實驗工具，突破藝術的界限；這項技術可以生成影像、作曲、寫詩、撰寫藝評及創造沉浸式體驗，可以成為新晉的創作伙伴，啟發創意。人工智能演算法能夠無限生成多樣化而獨特的作品，引發我們對藝術本質和定義作出深入思考。人工智能可否取代藝術家一直是個變化多元、與日俱新的議題，雖然合理質疑和否定聲音一直存在，但人工智能以空前手法改革藝術創作的潛力，同樣有目共睹。人工智能在藝術領域的成長，在可見未來仍然是一個炙手可熱的話題。

本展覽匯聚了在不同領域各擅擅場的藝術家，涉獵範圍包括水墨藝術、西方繪畫、攝影、音樂、作詞、表演及藝評等，當中大部份都不常運用科技創作。隨着多個月來的指導、工作坊及與人工智能顧問的合作，本展覽深入剖析人工智能如何循着不同路徑，在藝術家現有的創作基礎上突破界限。這種以過程為本的創作手法與展覽的核心概念緊緊扣連，目的希望探索藝術的本質，以及智能技術是否能像藝術家一樣思考和創作。綜觀整個過程，藝術家提出了許多哲學問題，包括語言的限制、人工智能對文化的影響、現實與人工的模糊分野、著作權、自由意志、人機協作、藝術原創性，以及人工智能的固有限制等議題。

藉着是次展覽，我們見證藝術家、人工智能顧問和智能技術碰撞交匯，其角色日益交織，一舉顛覆了藝術界的傳統框架。這種協作模式形成一個獨特的三角關係，重塑了我們對著作權的理解。藝術如要融合人工智能生成的技術，需要藝術家的技術專長；同時，受人工智能演算法的驅動電腦技術，亦有賴程式設計師的積極參與和詮釋。此外，人工智能顧問提供的指

The advent of AI is not only impacting our daily routines but also radically reshaping the artistic landscape. AI offers unique tools that artists can experiment with, pushing the boundaries of art. It generates visuals, composes music, crafts poetry, critiques art and creates immersive experiences, serving as an unconventional collaborator that stimulates creativity. AI algorithms are capable of generating endlessly varied and unique works, prompting profound questions about the nature and definition of art itself. The discourse surrounding AI potentially replacing artists is multifaceted and continually evolving. While valid concerns and objections exist, there is also recognition of AI's potential to enhance the artistic process in previously unimaginable ways. The future of AI in art is likely to remain a dynamic and hotly debated topic.

This exhibition brings together artists from a variety of disciplines, including ink art, western painting, photography, music, lyric writing, performance and arts criticism, many of whom do not typically incorporate technology into their practice. By introducing them to AI tools through workshops and months-long tutorials, as well as collaborations with AI experts, this exhibition explores how AI technology can potentially push the boundaries of these artists' works based on their existing practices from different trajectories. The process-oriented approach aligns with the exhibition's core concept, which revolves around questioning what ultimately art is, especially if machines can think and create like artists. Over the course of several months, this process leads to the artists raising philosophical questions on a wide array of topics, including the limits of language, AI's influence on culture, the blurring line between reality and artificiality, authorship, free will, human-machine collaboration, originality in art and AI's inherent limitations.

In this exhibition, we are witnessing a fascinating convergence where the roles of the artists, the AI experts and the intelligent machines are becoming increasingly intertwined, disrupting the conventional boundaries within the art world. This collaborative dynamic forms a unique triad that reshapes our understanding of authorship. The fusion of art with AI-generated technology has necessitated that artists develop technical expertise, while programmers and computers, driven by AI algorithms, actively participate in the creative and interpretive facets of artistic production. Besides, AI experts provide thematic guidance and practical tips, facilitating more intricate interactions between artists and machines. This type of interaction between artists and AI experts not only reshapes artistic methods but also obscures established roles within the realm of artistic production. It raises intriguing questions: Are the AI experts considered the artists behind the exhibited works in this context? Or could

THE SINGULARITY

導和實用技巧，亦促進了藝術家與智能技術之間的繁複互動。藝術家與人工智能顧問的交流不僅重新形塑了藝術的創作模式，也模糊了藝術創作上的既定角色劃分。這些交錯激發了有趣的思考：人工智能顧問會否被視為是這些展品的真正藝術家？又或者，人工智能就是這次展覽的藝術家？

作為策展人，我在整個創作過程中均面對嶄新的困難與挑戰。這次展覽透過採用複雜的協作體驗重新定義策展方式，豐富了人機之間的互動性，就策展手法深入研討。回顧如此種種，如果沒有直接與人工智能顧問合作，這一切不可能成事。這次展覽的方方面面，不單由我個人所決定，更受到人工智能技術、人工智能顧問與藝術家的創意貢獻所左右。在整個策展過程中，我與參展藝術家、設計師和人工智能顧問一起不斷學習操作不同工具。從展覽的綱領、策展主題、藝術作品、視覺設計到宣傳物品，幾乎都是由人工智能直接生成或協助生成的，是一次破格創新的策展方法實驗。

由衷感謝香港藝術發展局提供這個平台，讓我得以深入探索藝術與人工智能技術的交融。我亦衷心感激參與本項目的藝術家、人工智能顧問和展覽設計師，他們勇於學習、擺脫固有框架，就人工智能技術對人類未來的深遠影響提出重大反思。是次展覽期望成為廣大新論述的濫觴，隨着人工智能科技日繁、逐漸深入人類生活的每個層面，一連串發人深省的問題亦已浮現。人類創意的未來將何去何從？隨着智能技術更趨智能和自主，我們對藝術的了解和表達將如何蛻變？期待你加入我們，在「過化存神」的旅途上一同深思。

(上述為人類創意和人工智能書寫的協作成果。原文以英語撰寫。)

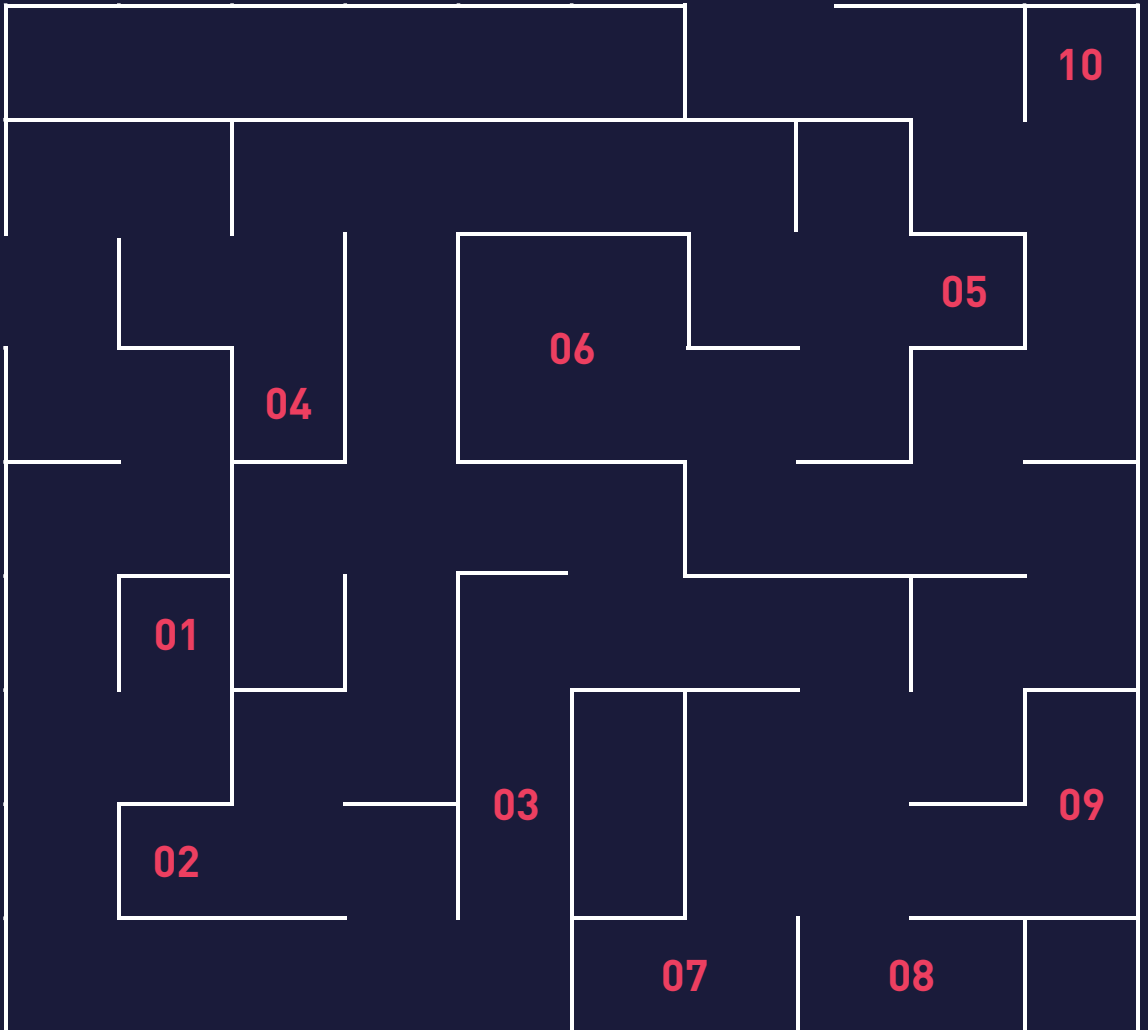
it be that the AI itself is the artist in this exhibition?

As the curator of this exhibition, I am navigating a new level of complexity throughout the journey. This exhibition is redefining curatorial approaches by adopting complex, collaborative experiences, thereby enriching the interplay between humans and machines and intensifying discussions around curatorial tactics. Reflecting on this, I realise that curating this exhibition would not have been feasible without working directly with AI experts. The possibilities within this exhibition are not determined solely by my decisions, but are also significantly influenced by the capabilities of AI technologies and the creative input from both the AI experts and artists. Throughout the extensive process of curating this exhibition, I, along with the artists, designers and AI experts involved in this project, have been continuously learning various AI tools. Everything from the exhibition's statements, curatorial themes, artworks, visual designs and promotional materials is either generated or facilitated by AI, representing a groundbreaking experiment in the practice of exhibition-making.

I extend my gratitude to the Hong Kong Arts Development Council for providing the platform to embark on this extensive exploration of art and AI technology. My sincere appreciation goes to the artists, AI experts and the exhibition designer involved in this project, who have courageously learned new things, experimented with ideas, and prompted critical reflections on the profound implications that technology might hold for our imminent future. This exhibition represents just the opening chapter in a much larger narrative. As AI systems grow in complexity and become more woven into the fabric of human existence, they usher in a spectrum of profound existential inquiries that are just beginning to unfold. What will the future of human creativity look like? How will our understanding of art and expression evolve as machines become more intelligent and autonomous? These are the questions we invite you to ponder as you journey through *Beyond the Singularity*.

(This written statement is a product of a collaborative effort between human creativity and AI-assisted writing. The original text is written in English.)

過化存神



- 01** 《宇宙閃電麵包》
陳育強

Lightning Bread in Space
by Kurt Chan Yuk-keung
- 02** 《劇本醫生》
陳子豐、盧宜敬

AI script Doctor
by David Chan & Kingston Lo
- 03** 《62 歲做唱作人唔得咩》
周耀輝

I became a singer-songwriter when I turned 62
by Chow Yiu-fai
- 04** 《徘徊在現實與人工智能之間》
蘇慶強

Between Reality and AI
by So Hing-keung
- 05** 《AI 哈哈藝術世界》
麥影彤二

AI HAHA "The Art World"
by Mak2
- 06** 《高速朝聖》(選段)
真善美村

High Speed Pilgrimage (Excerpt)
by Virtue Village
- 07** 《尋找藝評：無寫之寫》
黃小燕

In Search of Art Criticism: Writing Without Writing
by Phoebe Wong
- 08** 《血戰 AI - 徐沛之繪畫》
徐沛之

Challenging AI: The Paintings of Chui Pui Chee
by Chui Pui-chee
- 09** 《我的素描老師》
黃進曦

My Drawing Teacher
by Stephen Wong Chun-hei
- 10** 《蛙智能托邦 2024》
蛙王和蛙后

Frog AI Topia 2024
by Frog King & Frog Queen

活動

PROGRAMMES

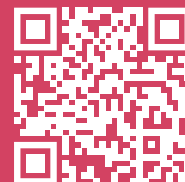
工作坊 WORKSHOP

講座 TALK

導賞 GUIDED TOUR

需預先登記

Pre-registration required



「何止基本：人工智能入門導航」



BEYOND THE BASICS: NAVIGATING AI FUNDAMENTALS

你是否對人工智能的龐大潛能和影響力深感興趣，但不知從何入手？歡迎參與本工作坊「何止基本：人工智能入門導航」，跟隨我們的導師學習操作人工智能工具的基本知識，帶領你翱遊人工智能的世界。在這個互動工作坊中，我們的資深導師將為你講述人工智能的基本概念，將繁化簡。不論你是完全新手入門，還是已具備一定知識的行家，本工作坊均能讓不同水平的參加者受惠。完成導航後，你將掌握實在的基本原理、工具操作技巧，並能對人工智能所帶來的影響作出批判思考。誠邀你一同踏上冒險之旅，挖掘並破解人工智能的種種謎團，任好奇心展翅翱翔。增進人工智能知識機會難逢，萬勿錯失！

Are you intrigued by the impactful potential of artificial intelligence (AI) but unsure where to start? Join us for our “Beyond the Basics: Navigating AI Fundamentals” where we’ll equip you with the foundational knowledge to navigate the world of AI tools. In this interactive workshop, our expert instructor will simplify the complexities of AI into understandable concepts. Whether you’re a complete beginner or have some prior knowledge, this workshop is designed to cater to all levels of expertise. By the end of this workshop, you’ll have a solid understanding of AI fundamentals, practical experience with AI tools, and the ability to assess AI’s implications critically. Join us on an adventure to decode the mysteries of AI. Just bring your curiosity and don’t miss this opportunity to level up your AI knowledge!

導師 陳家明

Tutor Chan Ka-ming

日期 2024 年 3 月 16 日 (星期六)
2024 年 3 月 24 日 (星期日)

Date 16 March 2024 (Sat)
24 March 2024 (Sun)

時間 下午 3 時至 4 時 30 分

Time 15:00 – 16:30

地點 Landmark South 5 樓藝發局會議室
(黃竹坑業勤街 39 號)

Venue HKADC Meeting Room, 5F, Landmark South
(39 Yip Kan Street, Wong Chuk Hang)

名額 每節 15 名

Quota 15 for each session

費用 HKD\$50 按金

Fee HKD\$50 Deposit

* 參加者需自備手提電腦 Participants need to bring along laptops for the workshop

* 適合 16 歲或以上人士參與 Suitable for ages 16 or above

* 工作坊以粵語進行 Conducted in Cantonese

「何止藝術：人工智能時代的創作流變」



BEYOND ART? NAVIGATING THE AGE OF AI

本講座將深入探討參展藝術家在是次展覽的創作歷程，讓觀眾了解他們長達多個月來在創作上與人工智能技術的碰撞交匯。在科技發展日新月異的今天，人工智能與藝術的相會已成為一門炙手可熱的議題。站在創作與運算的交叉點，人工智能正重新定義藝術的本質。在是次講座中，參展藝術家將向觀眾娓娓道來他們對多個議題的真知灼見，包括人工智能藝術、人工智能協同創作、人工智能對各藝術範疇的改變及影響，以及箇中涉及的道德矛盾等，討論範圍涵蓋人工智能作為新興創作者的身份定位、對藝術的挑戰，以及與人類創意的互利關係，藉此展望藝術創作的嶄新未來。

This talk will delve into the experiences of the participating artists in this exhibition, providing insights into their months-long creative processes involving artificial intelligence (AI) technology. In today's rapidly evolving technological landscape, the intersection of AI and art has become a subject of profound fascination and debate. We stand at the crossroads of creativity and computation, where AI is redefining the essence of art itself. Throughout this talk, we will hear directly from the participating artists about their journeys through AI-generated art, ethical dilemmas, creative collaborations, and the transformative impact of AI on various artistic domains. Our discussions will cover topics ranging from AI as a new creator to the challenges of AI art, exploring the symbiotic relationship between AI and human creativity and envisioning the future of artistic imagination.

講者 陳育強 // 陳敬元 (真善美村) // 徐沛之 // 麥影彤二

Speakers Kurt Chan Yuk-keung // Joseph Chen (Virtue Village) // Chui Pui-chee // Mak2

主持 梁學彬

Moderator Isaac Leung

日期 2024 年 3 月 23 日 (星期六)

Date 23 March 2024 (Sat)

時間 下午 4 時至 5 時

Time 16:00 – 17:00

地點 Landmark South 5 樓藝發局會議室 (黃竹坑業勤街 39 號)

Venue HKADC Meeting Room, 5F, Landmark South (39 Yip Kan Street, Wong Chuk Hang)

名額 每節 40 名

Quota 40 for each session

* 適合 12 歲或以上人士參與 Suitable for ages 12 or above

* 講座以粵語進行 Conducted in Cantonese

藝術家及策展人導賞

ARTIST & CURATOR GUIDED TOUR



「過化存神」藝術家及策展人導賞分為三場，由策展人或參展藝術家帶領觀眾以不同視角深入了解展覽作品背後的創作理念及人工智能技術的應用，探討人工智能如何影響藝術的表達形式及未來的發展方向。

Beyond the Singularity Artists & Curator Guided Tour is divided into three sessions, led by the curator and participating artists. These tours offer an in-depth understanding of the creative concept behind the exhibits and the application of artificial intelligence (AI) from different perspectives, exploring how AI influences the forms of artistic expression and the future of art.

地點 展藝館

Venue SHOWCASE

名額 每節 20 名

Quota 20 for each session

與徐沛之、麥影彤、梁學彬

With Chui Pui-chee, Mak2, Isaac Leung

日期 2024 年 3 月 23 日 (星期六)

Date 23 March 2024 (Sat)

時間 下午 2 時 30 分至 3 時 30 分

Time 14:30 – 15:30

與策展人梁學彬

With Curator – Isaac Leung

日期 2024 年 3 月 24 日 (星期日)

Date 24 March 2024 (Sun)

時間 下午 1 時 30 分至 2 時 30 分

Time 13:30 – 14:30

與黃小燕、梁學彬

With Phoebe Wong, Isaac Leung

日期 2024 年 3 月 30 日 (星期六)

Date 30 March 2024 (Sat)

時間 下午 2 時 30 分至 3 時 30 分

Time 14:30 – 15:30

* 適合 12 歲或以上人士參與 Suitable for ages 12 or above

* 導賞以粵語進行 Conducted in Cantonese

THE CREW 製作團隊

策展人
梁學彬

CURATOR
Isaac Leung

藝術家
陳育強
周耀輝
徐沛之
麥影彤二

ARTISTS
Kurt Chan Yuk-keung
Chow Yiu-fai
Chui Pui-chee
Mak2
So Hing-keung
Phoebe Wong
Stephen Wong Chun-hei
David Chan & Kingston Lo
Frog King & Frog Queen
Virtue Village

蘇慶強
黃小燕
黃進曦
陳子豐、盧宜敬
蛙王和蛙后
真善美村

項目統籌
蔡雪兒

PROJECT COORDINATOR
Paris Tsoi

人工智能顧問
陳家明
江景先

AI EXPERTS
Chan Ka-ming
James Kong

平面、空間設計
及建築
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**GRAPHIC, SPATIAL DESIGN
AND BUILD**
NNNNNNN.co

創作總監
鄭智禮

CREATIVE DIRECTOR
Chilai Howard

空間設計
陳靖筠
樂穎詩

SPATIAL SPECIALIST
Harriet Chan
Ivy Lok

平面設計
金貞彤
蔡佳佳

DESIGN SPECIALIST
Tung Kam
Kaikai Tsoi

影片攝影
Moving Image
Studio

CINEMATOGRAPHER
Moving Image
Studio

《劇本醫生》
AI SCRIPT DOCTOR

鳴謝
前進進戲劇工作坊

CREDITS
On & On Theatre Workshop

《62歲做唱作人唔得咩》
**I BECAME A SINGER-SONGWRITER
WHEN I TURNED 62**

藝術家語音人工智能
伍卓賢

ARTIST'S VOCAL AI
Ng Cheuk-yin

聲音技術支援
VX Real Limited

VOCAL TECHNICAL SUPPORT
VX Real Limited

配樂
唐毅

SOUNDTRACK
Matthew Tong

影像支援
吳佩璇

IMAGE SUPPORT
Kathy Ng

資料搜集
陳思朗
王樂儀

RESEARCH SUPPORT
Chan Sze-long
Yvette Wong

《尋找藝評：無寫之寫》
**IN SEARCH OF ART CRITICISM:
WRITING WITHOUT WRITING**

錄像製作
姚妙麗
鍾詠珊

VIDEO PRODUCTION
Joe Yiu
Chung Wing-shan

資料整理
許嘉岐
林詠思
杜泳嵐

DATA PROCESSING
Karen Hui
Vicki Lam
To Wing-nam

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