



CREATIVE CONNECTIONS: EAST MEETS WEST

创新连接：中西数字艺术对话展

CREATIVE CONNECTIONS: EAST MEETS WEST

AN EXHIBITION OF DIGITAL WORK BY ARTISTS FROM DMU AND GDUT

23rd April - 13th May 2018

729 Art Cafe

School of Art and Design

Dongfeng Road Campus

Guangdong University of Technology

CHINA

创新连接：中西数字艺术对话展

德蒙福特大学与广东工业大学联合数字艺术作品展

展览时间：2018年4月23日-5月13日

展览地点：广东工业大学艺术与设计学院729艺术展厅



廣東工業大學
Guangdong University of Technology



INTRODUCTION

This exhibition brings together a diverse range of work by digital artists from De Montfort University in Leicester, UK and Guangdong University of Technology in Guangzhou, China. It is part of a developing collaboration between the two Universities.

The work featured includes print-based, video and interactive work from both Universities, together with a new Virtual Reality artwork by internationally-known artist Ernest Edmonds, a Virtual Reality experience based on the Pailou Gate at GDUT and the inaugural showing of a new collection of print-based and digital work by GDUT International Professor and DMU Visiting Research Fellow, Sean Clark.

In presenting this unique collection of artworks we hope to further develop the relationship between GDUT and DMU and create new opportunities for international collaboration between individual artists from the East and West.

Sean Clark and Yi Ji
Exhibition Curators

The exhibition has been produced in collaboration with the Institute of Creative Technologies at De Montfort University. www.ioct.dmu.ac.uk

For additional documentation please visit interactdigitalarts.uk/creativeconnections

Many thanks to both Universities for their support and to the Australian Embassy, VR company GDI and Professor Feng, Head of Department of Digital Media for their involvement. Thanks also to the students at GDUT for their participation in the workshops and exhibition and for help with installing the artworks.

展览介绍

从半个世纪前计算机诞生之初就有人尝试将计算机用于艺术创作，随着技术的发展探索新的技术和新的思考方式对我们的世界和文化艺术都有重要的影响。此次中西数字艺术对话展邀请国际及国内知名数字媒体艺术家和实践者联合举办中西数字媒体艺术对话展。通过此次展览展示前瞻的新艺术的跨界合作，激发科技与艺术的创新与灵感促进跨领域交流。

Sean Clark教授和纪毅博士是本次艺术展览的策展人，也是致力于促进中西文化科技交流的推动者。展览的一部分作品包括了广东工业大学和英国德蒙福特大学两所大学师生的作品，包括各类数字多媒体形式和交互形式。除此之外，展览同时还展出由国际艺术家合作完成的虚拟现实作品—广东工业大学的“牌楼”的虚拟现实和体验作品。观众有机会在展览中感受不同的风格的艺术作品和交互体验。

通过这次展览，我们希望可以促进大学之间的国际化长远合作，同时创造新的机会给东方和西方个人艺术家进行国际合作。

策展人：

Sean Clark

纪毅

展览是与德蒙福特大学创新技术研究所一起联合制作的。www.ioct.dmu.ac.uk

其他的相关资料，请访问 interactdigitarts.uk/creativeconnections

在此，非常感谢两所大学的支持，感谢澳大利亚大使馆、GDI 科技公司和广工艺术与设计学院数字媒体系的积极参与。同时也感谢GDUT的学生们为国际工作坊和展览所做的努力。

ARTWORKS / 艺术作品

SEAN CLARK

Sean Clark is an artist, researcher and technologist with an interest in systems theory and connected digital art. The work on display in this exhibition includes a new series of prints, each generated through the interaction of multiple connected colour swapping systems, and a new Virtual Reality rendering of an earlier colour sorting piece composed of two connected systems. Sean is a Visiting Research Fellow at De Montfort University and an International Professor at GuangDong University of Technology. He is also the founding director of web/app company Cuttlefish Multimedia Ltd and digital arts company Interact Digital Arts Ltd. In 2016 he was the co-winner of the Lumen Prize for 3D/Sculpture in London and the inaugural ArtCHI Award in San Jose, California.

Sean Clark 是一位艺术家、研究人员同时也是科学技术人员，他对于系统理论和数字艺术很感兴趣。展览的艺术作品中包括了一系列新的印刷作品，这些作品通过多种颜色交互系统生成；还有一个虚拟现实作品，里面渲染了颜色排序块。Sean 不仅是德蒙福特大学的应邀研究人员，也是广东工业大学的国际教授。他也是Cuttlefish多媒体有限公司和数字艺术公司互动数字艺术有限公司的创始董事。2016年，他共同获得了伦敦3D/雕塑奖和美国加利福尼亚州圣何塞市的ArtCHI奖。

www.seanclark.me.uk

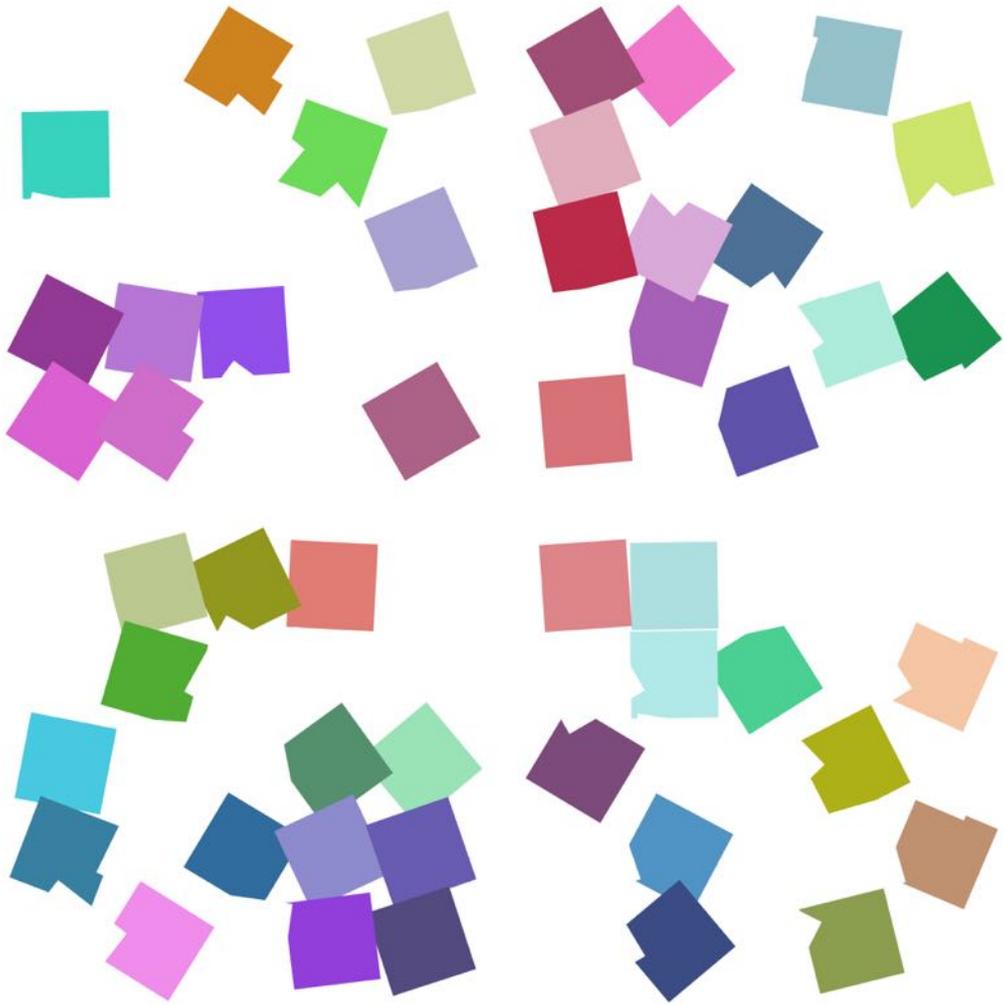
Exhibits

Prints: Transformations Variations 4.1 to 4.9 (2018); Transformations Variations 9.1 to 9.3 (2018)

Screen-based Work: Transformations Variations (2018)

Virtual Reality : Transformations VR (2018)

Transformations Variations 9.1 (2018), 60cm x 60cm, Digital Print



ERNEST EDMONDS

Ernest Edmonds was born in London in 1942. He now lives and works in central England and in Sydney, Australia. In 2017 he was awarded the ACM SIGGRAPH Distinguished Artist Award for Lifetime Achievement In Digital Art and the ACM SIGCHI 2017 Lifetime Achievement Award for the Practice of Computer Human Interaction. He is Professor of Computational Art at De Montfort University and Director of IOCT. Routledge have just published "Generative Systems Art: the work of Ernest Edmonds" by Francesca Franco. Ernest Edmonds' own latest book is "The Art of Interaction: What HCI Can Learn from Interactive Art", Morgan&Claypool.

Ernest Edmonds, 1942年出生在伦敦。他现在在英国中部和澳大利亚悉尼工作和生活。2017年他被授予“ACM SIGGRAPH 2017年度数字艺术终身成就杰出艺术家奖”和“ACM SIGCHI 2017年人机互动实践终身成就奖”。他是德蒙福特大学电脑艺术专业的教授在和IOCT的主任，并出版了《Generative Systems Art: the work of Ernest Edmonds》相关的专业书籍。他的新书是《The Art of Interaction: What HCI Can Learn from Interactive Art》。

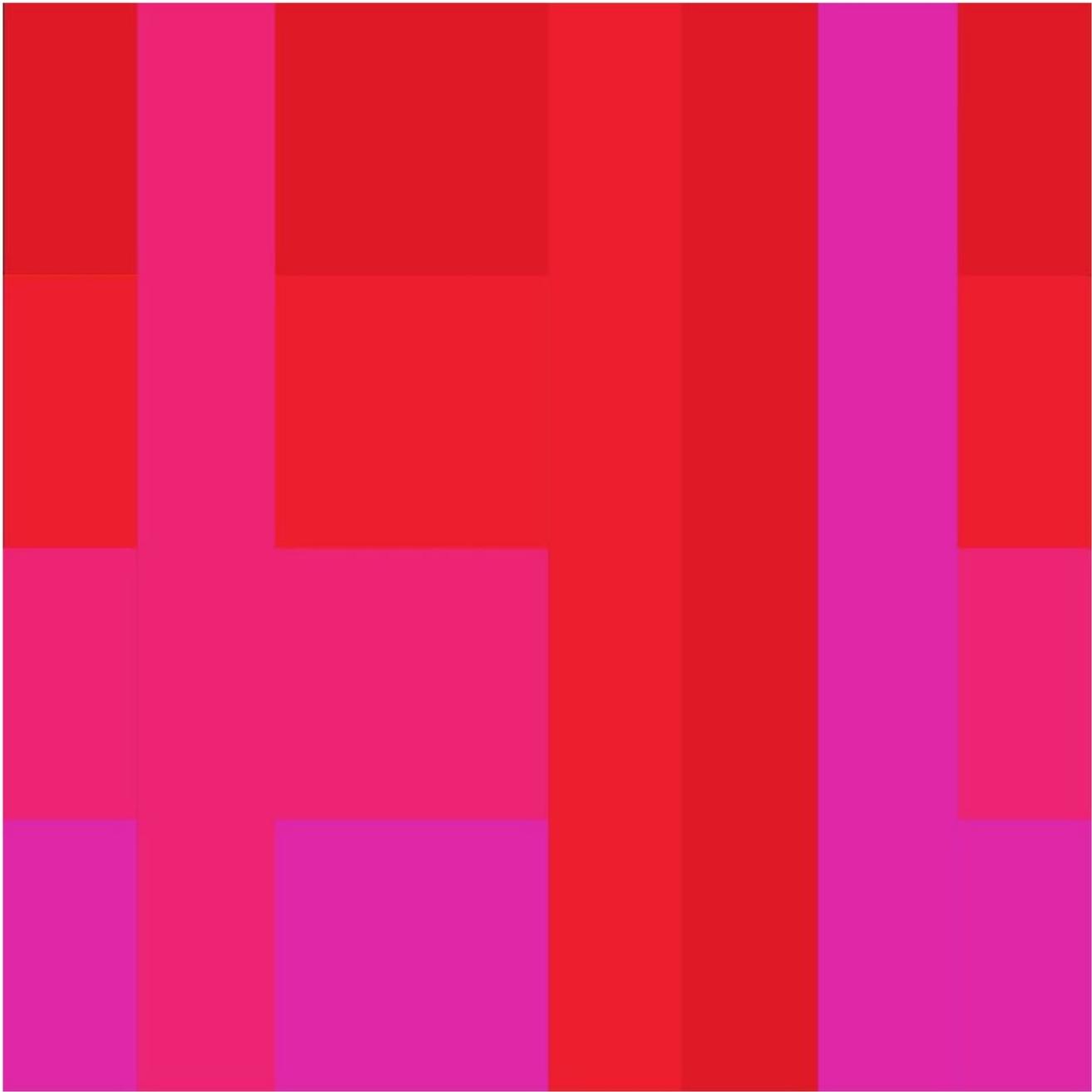
www.ernstedmonds.com

Exhibits

Print: Shaping - China Study 1 (2018)

Virtual Reality: Constructs/Conducts (2018) by Ernest Edmonds & Pip Greasley

China Study 1 (2018), 88cm x 88cm, Digital Print



TRACY HARWOOD

Tracy Harwood is Professor of Digital Culture at the Institute of Creative Technologies, De Montfort University. She uses creative technologies to explore emerging patterns of virtual, augmented and psychophysiological behaviour. The work on display is a videograph of collaborative work she has undertaken with colleagues in the USA, Canada and New Zealand to explore hyperreality and the links between on- and offline co-creative behaviour.

Tracy Harwood在德蒙福特大学是创新科技组织里数字文化领域的教授。她利用创新技术探索了虚拟世界的新兴模式、虚拟的增强以及随之产生的心理生理行为。参加展览的有她和其他人员合作的艺术品视频和图像，她和她的同伴一起在美国、加拿大和新西兰承担了探索超现实世界的艺术工作，同时深入了解线上线下合作行为之间的联系。

tgharwood.wixsite.com/website

Exhibit

Video: Hyperreal Living - The DraxTM Files (2017)

Hyperreal Living - The DraxTM Files (2017)



JOE MORAN

Joe Moran is a visual artist and researcher working with Light as a primary medium, exploring the contradictions of a material that exists in a space yet has no physical form to speak of. The work on display here use a combination of analog and digital processes to corrupt projected visual data. The resulting images explore pattern and colour without the need for the context of its surroundings.

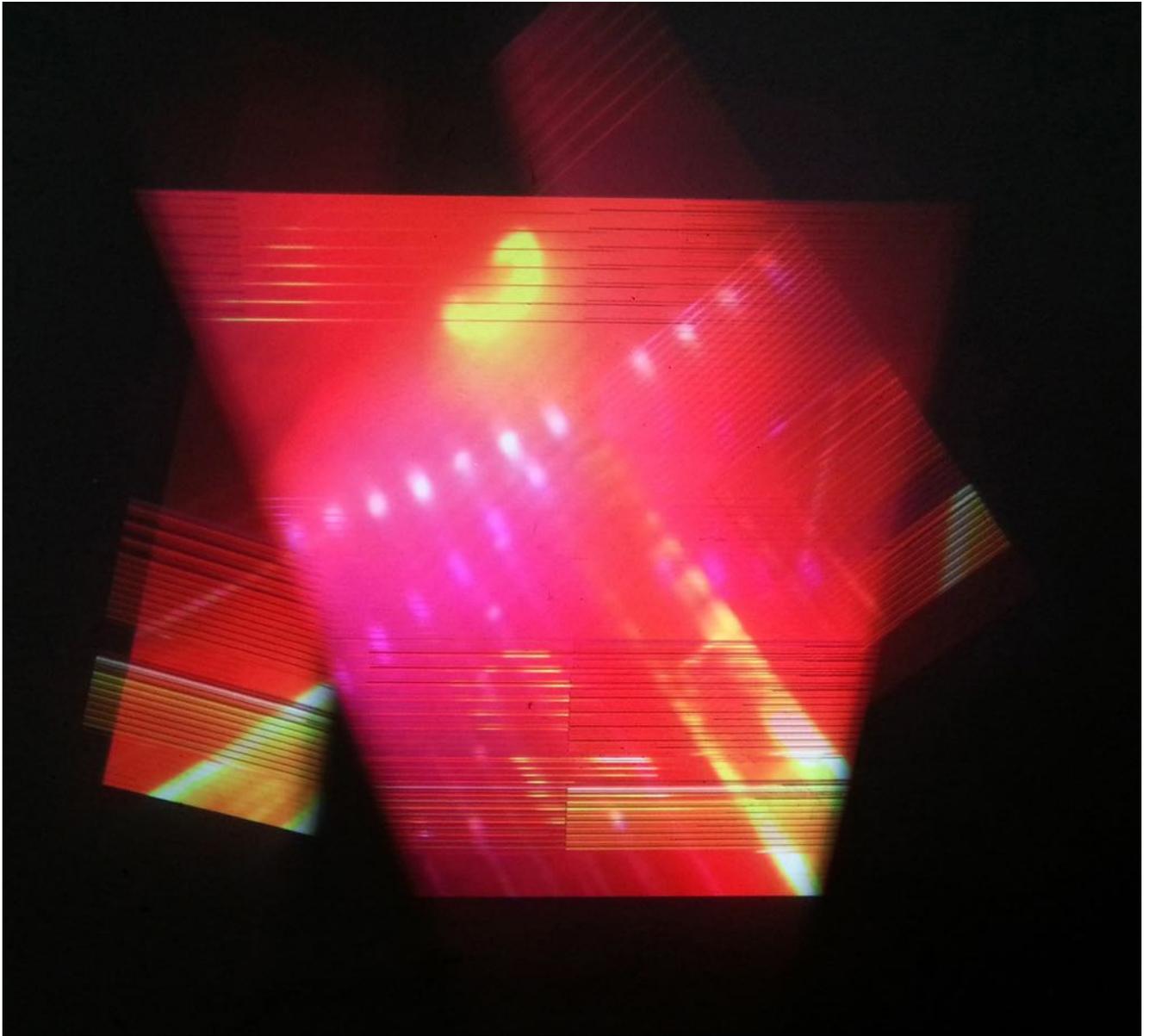
Joe Moran 是一个虚拟艺术家和研究人员。现在他工作的主要媒介是灯光，探索这种存在于这个世界但是却没有任何物理形态可言的材料的矛盾点。展览的艺术品利用了模拟组合和腐化可视化数据的数字进程方面的知识。最终图形能让人在不需要联系环境的条件下理解形式和颜色的变化。

www.joemoran.co.uk

Exhibits

Prints: Untitled (Disassembled) (2018); Untitled (Reassembled) (2018)

Untitled (Disassembled) (2018), 62cm x 57cm, Digital Print



FABRIZIO POLTRONIERI

Fabrizio Augusto Poltronieri is an award-winning computer artist, researcher and curator with a special interest in the relationships between Art, Design, Digital Media and Technology.

"Hephaestus", "Hades" and "Zeus" are part of the "Visual Theogonies" series, created by a piece of software that creates images from random mathematical operations of a given set of data contained within computer memory. The term "Theogonie" is borrowed from a poem written by the Greek Hesiod, in the late eighth century BC. The poem regards the birth of the Greek gods. In this series, the gods are transmuted by the will of computational algorithms governed by chance.

Fabrizio Augusto Poltronieri 是一位享誉的计算机艺术家、研究人员和策展人，他对于艺术、设计、数字媒体和技术的联系这一领域有着特殊的兴趣。“火神赫菲斯托斯”、“地狱”和“宙斯”是“虚拟神谱”系列的组成部分。这个系列的是这样创作出来的：往计算机中输入给定的数据，计算机进行随机运算产生图片。“神谱”的取词出处在Greek Hesiod公元8世纪末期写的一首诗中。这首诗提到了希腊天神的诞生。在这个系列里，天神会因为计算机算法的改变而随机变换。

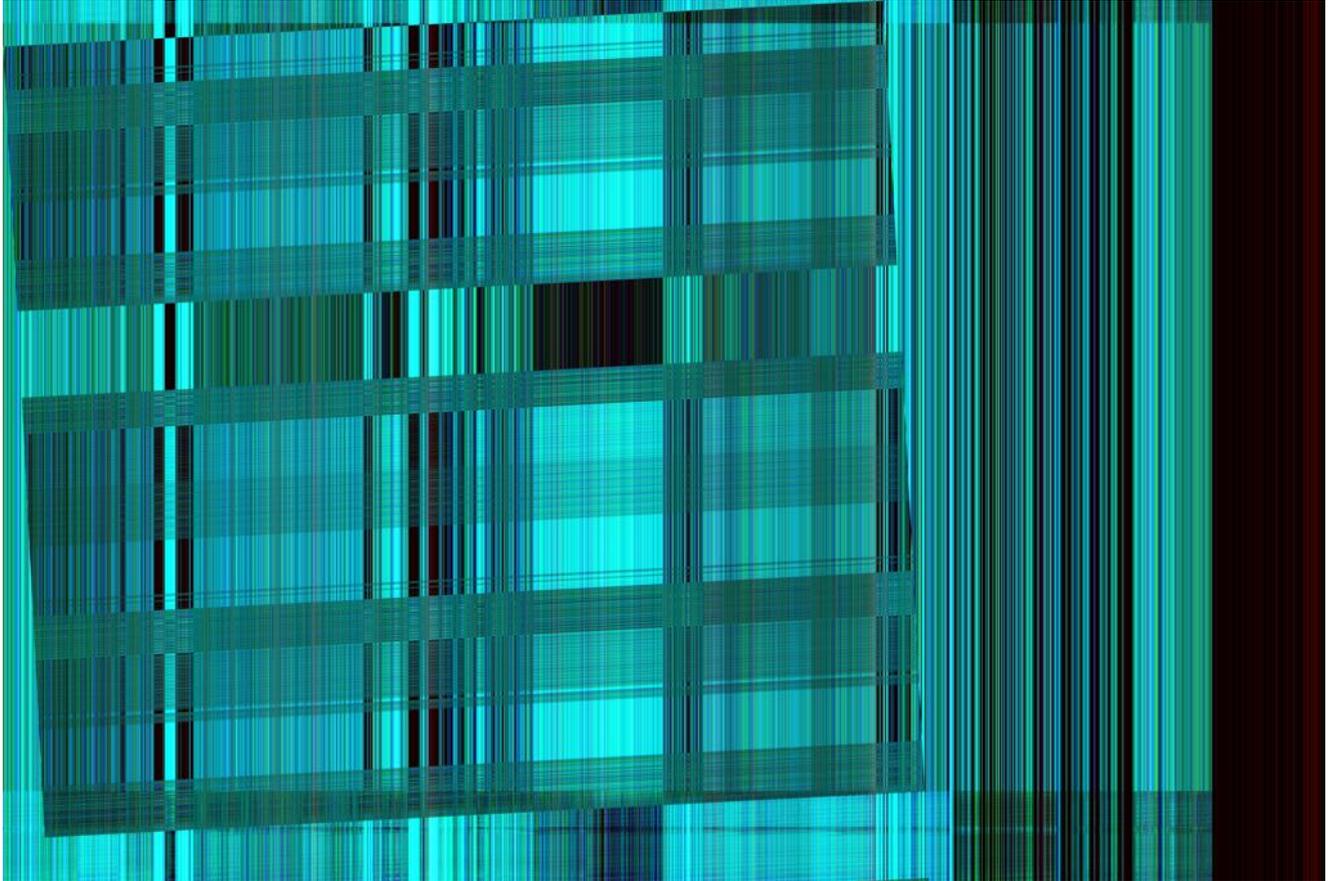
www.fabriziopoltronieri.com

Exhibits

Prints: Urnia (2014); Hades (2014); Hephaestus (2014)

Screen-based Work: Zeus (2014)

Hades (2014), 98cm x 68cm, Digital Print



MARTIN RICHARDSON

Martin Richardson is an artist, author and scientific researcher who gained his PhD at the Royal College of Art, London. He is a Professor of Modern Holography at De Montfort University, Leicester, where he leads a team of researchers in The Imaging and Displays Research Group, Faculty of Technology. His current research focuses on advanced holographic solutions for ultra-realistic 3D display allied to industry and multispectral holography for applications to optical security on banknotes. In 2011 he was honoured to receive The Royal Photographic Society 'Saxby Medal' in recognition of his sustained pioneering contributions to the science and technology of holographic imaging and to the physical understanding of its materials and applications. Other awards include The Shearwater Award and The UK Millennium Fellowship Award for his work with holography.

Martin Richardson是一位取得伦敦皇家艺术学院博士学位的艺术家、作家和科学研究员。他现在是德蒙福特大学现代全息术的教授，在Leicester他领导了一个研究图像、展览的技术团队。现在他的研究重点是先进的全息技术解决方案，这是关于超写实3D展览的，类似于工业和多光谱全息技术在钞票安全性上的应用。2011年，他被授予英国皇家摄影学会的“Saxby Medal”奖章，以嘉奖他在全息图像上的开创性贡献和全息技术材料和应用上的理解。另外，他凭借着他全息技术方面的作品还获得了海鸥奖和英国千禧奖赏。

Exhibit

Hologram: Dearest, Darkest Heart (2014)

Dearest, Darkest Heart (2014)



DALE ROBERTSON

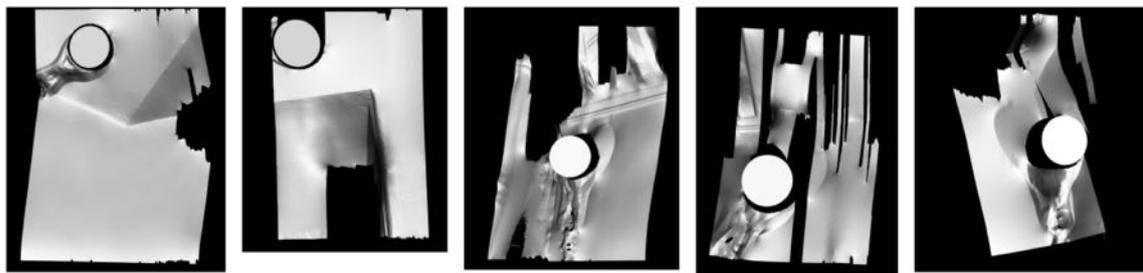
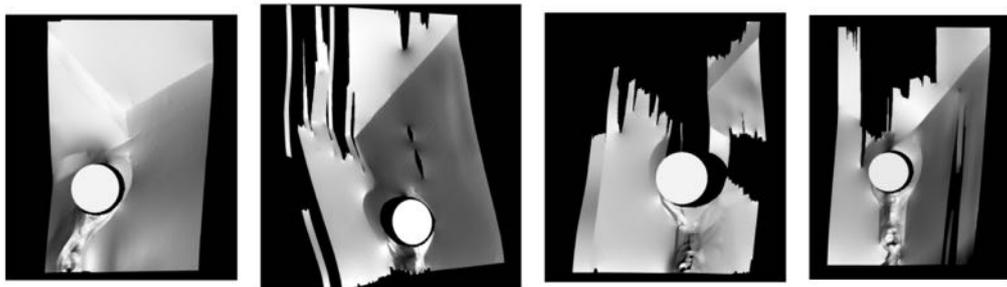
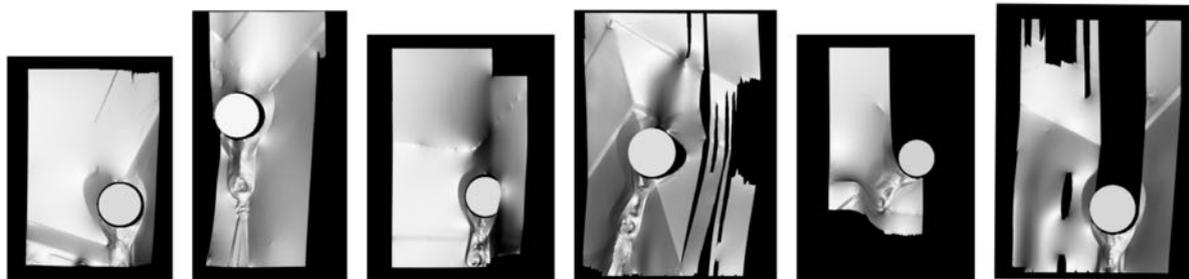
Dale Robertson is a Principal Lecturer at De Montfort University working in Fine Art. Dale's interest in site-specific art led him to start a PhD at De Montfort University in digital technology and site-specific art. Dale is working on a project to reinstall a large sculpture by Peter Randall-Page RA (Scales and Horizons in 1996) at Leicester Royal Infirmary. This is part of a series of projects to reinstall art works back into their original positions as virtual sculptures. The work in the exhibition is a part of this PhD project using 3D digital scans.

Dale Robertson是德蒙福特大学的美术首席讲师。他的志向在于场域艺术，由此他萌发了去争取德蒙福特大学博士学位的想法，现在已经是数字技术和场域特定艺术的博士。Dale正在进行一个重新安装位于莱斯特皇家医院的Peter Randall-Page RA（1996年的规模和视野）的大型雕塑的项目。同时这个项目也是博士项目展览的一部分，配合使用3D数字眼镜观看。

Exhibits

Prints: Room 2 (2018); Room 4 (2018); Room 6 (2018); Room 8 (2018)

Room 2 (2018), 84cm x 59cm, Digital Print



CRAIG VEAR

Craig Vear is Professor of Digital Performance (Music) at DMU. The piece performing here is called *On Junitaki Falls* (2017). It is a composition for live instrument and two artificial intelligent performers controlled by a central computer system which also controls the visual score. This version has been re-composed so that the AI operates without the human performer. All the materials that are performed reference Eric Dolphy's solo performance of *God Bless the Child*, although it is never heard or seen in the performance. The AI system controlling this performance of the work has been created using the principles of embodied cognition, offering a more co-operative environment for the performance of music.

Craig Vear是德蒙福特大学的数字表演（音乐方面）的教授。这种形式的表演在英国叫做“*On Junitaki Falls*”（2017）。这是一种作曲形式，帮助现场乐器和两个受控于同一计算机系统的人工智能表演者作曲，这个计算机系统同时控制着乐谱。表演的所有材料都参考了Eric Dolphy的独演“上帝啊为那个孩子祷告”，即使这首曲目从来没有在表演中出现。人工智能系统控制着整场表演，给音乐表演一个更大的协作创作环境。

ev2.co.uk/vear

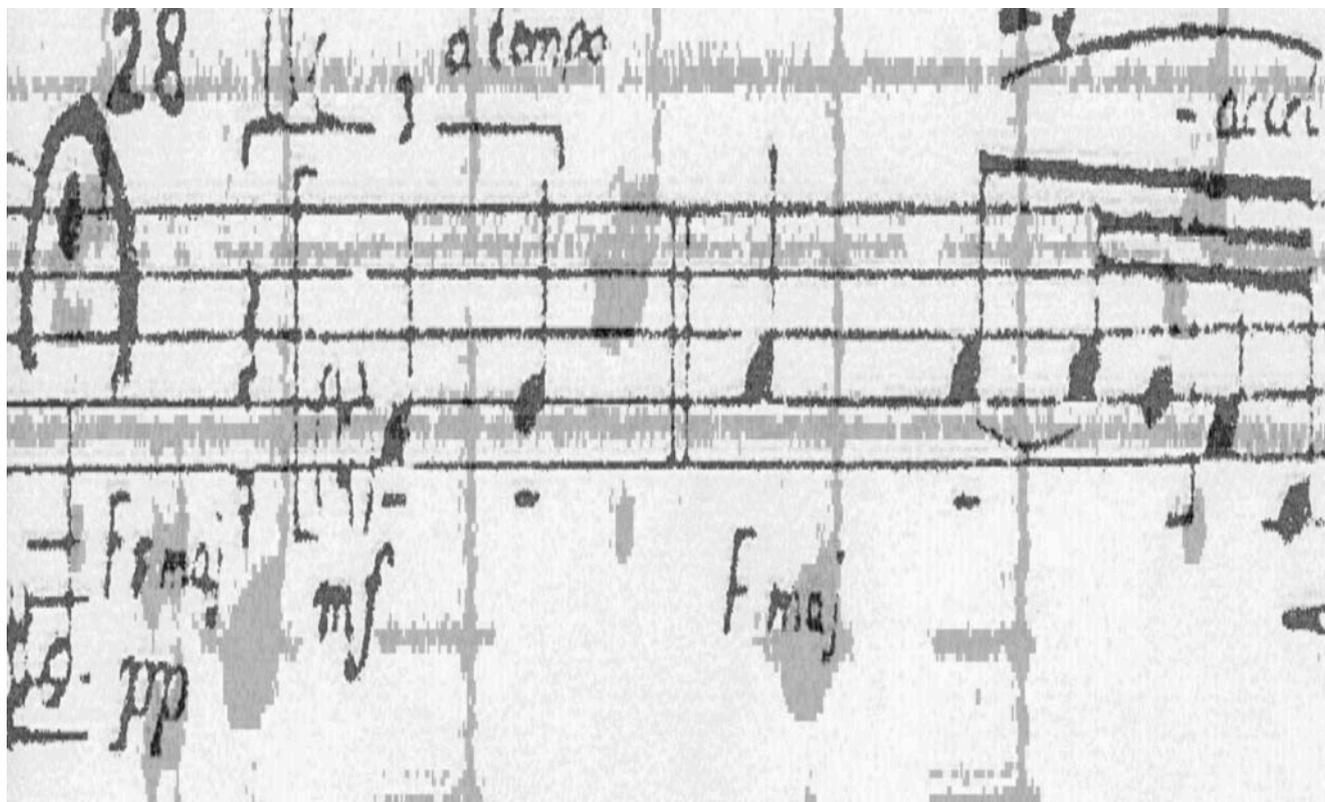
Exhibit

Composition: *On Junitaki Falls* (2017). Credits: Composer Craig Vear; Performer Christopher Redgate; Commissioned by Christopher Redgate and Roger Heaton; Original music score Roger Jannotta, permission to reproduce kindly granted; Craig Vear's compositions are published by Composers Edition

作品：*On Junitaki Falls*（2017）。演职员名单：作曲家Craig Vear；演员Christopher Redgate；定制 Christopher Redgate和Roger Heaton；配乐Roger Jannotta，授权；由 Composers Edition出版的Craig Vear的作品。

On Junitaki Falls (2017)

Handwritten musical score on a five-line staff. The number "28" is written at the top left. The tempo marking "a tempo" is written above the staff. The score includes a large slur over the first few notes, followed by a series of notes with stems. Below the staff, there are dynamic markings: "pp" (pianissimo), "mf" (mezzo-forte), and "f. maj" (forte maggiore). The word "accell" (accelerando) is written at the top right, indicating a change in tempo.



28

a tempo

accell

f. maj

pp

mf

f. maj

YI JI

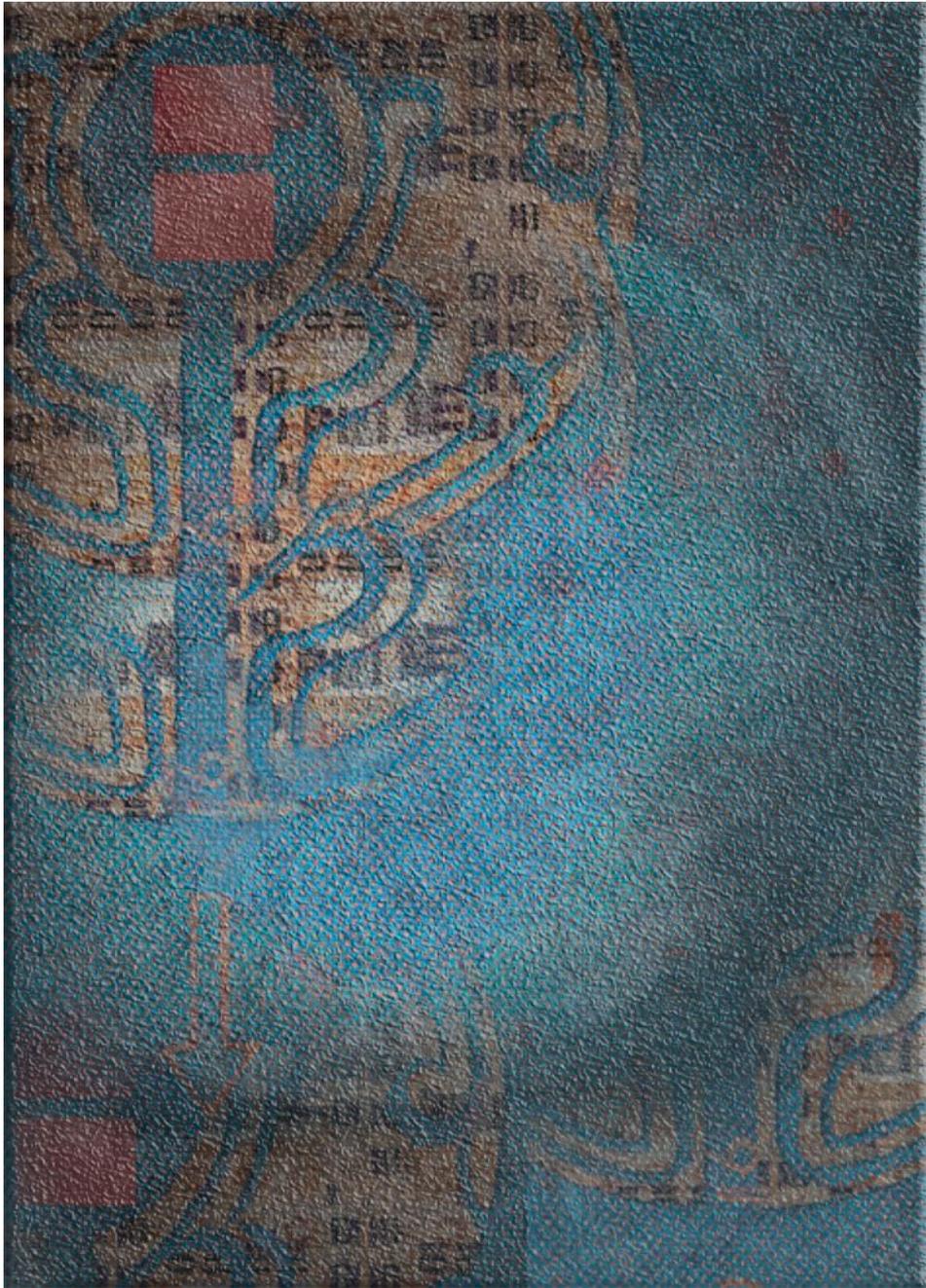
YI JI is an associate professor in school of art and design, Guangdong university of technology, he is an interaction design, digital artist and curator. In 2014, he was nominated by the Hong Kong Dragon Foundation to be 100 young Chinese leaders. In recent years, a total of eight papers have been published, among which seven are published in international academic conferences. Research results and design works are exhibited around the world (Sydney, Singapore, Shanghai, Beijing), and workshops are held at several academic conferences and art exhibitions. Association for Computing Machinery (ACM) member, member of the Australian Interactive Design Association, members of the Singapore Computer Information Association, the user experience design association will have (UXPA, the United States), Chairman of 2017 Chinese CHI, Chairman of 2016 Australia HCI exhibition.

纪毅博士现任广东工业大学信息艺术设计系教授、交互艺术家，国际艺术策展人。在悉尼科技大学认知与创意研究中心从事人机交互设计与交互艺术的研究。此外，纪毅博士还担任澳大利亚交互协会高级会员、ACM会员、澳华科技协会理事，华人华侨人机交互协会理事。曾服务多个国际学术会议，担任 2017 Chinese CHI technical Chair. 2016 澳大利亚国际人机交互大会交互艺术展主席，2015 Chinese CHI Art exhibition Chair.

Exhibit

Print: Smart Chinese Digital Culture (2017)

Smart Chinese Digital Culture (2017), 50cm x 70cm, Digital Print



THE PAILOU GATE / 牌楼门

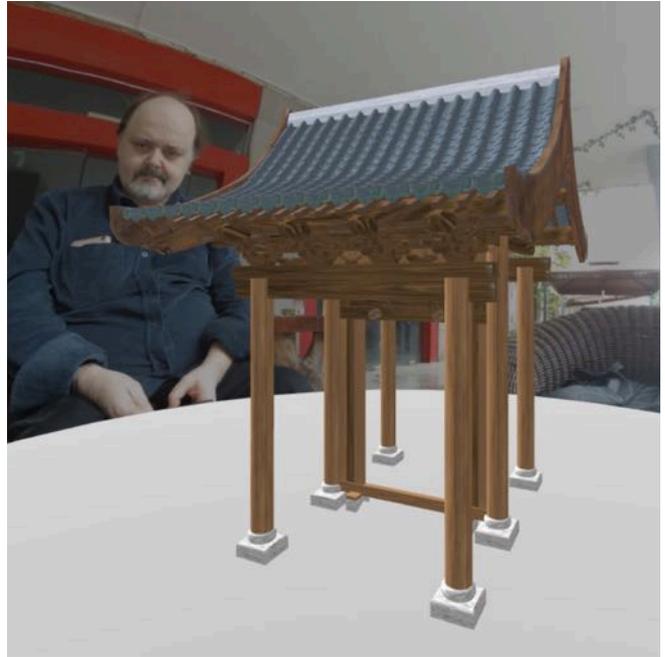
This project involves the Virtual Reality reconstruction of a 500 year-old pailou gate, or memorial archway, that is located at Guangdong University of Technology. The small roofed structure was built during the Ming Dynasty in Shanxi Province. In 2013 it was acquired by GDUT and in 2014 it was installed in the courtyard of one of the main University buildings on the Dongfeng Road Campus in Guangzhou.

The project team involves students from GDUT, with guidance from Sean Clark and Yi Ji. As well as being of architectural interest, the Pailou Gate project is also being used as a vehicle for exploring and teaching web-based Virtual Reality and Augmented Reality technologies.

本项目主要是用虚拟现实技术重建一个具有500年历史的牌楼门，该建筑目前位于广东工业大学东风路校区的图书馆一楼中央。该建筑始建于明代的山西省，在2003年被广东工业大学收购并于2014年将其安装在东风路校区。

该项目主要由我校学生负责，纪毅教授和Sean Clark教授担任指导老师。该项目除了具有建筑展示的意义外，牌楼门项目还被用作探索和教授基于Web的虚拟现实和增强现实技术的工具。

interactdigitalarts.uk/pailougate



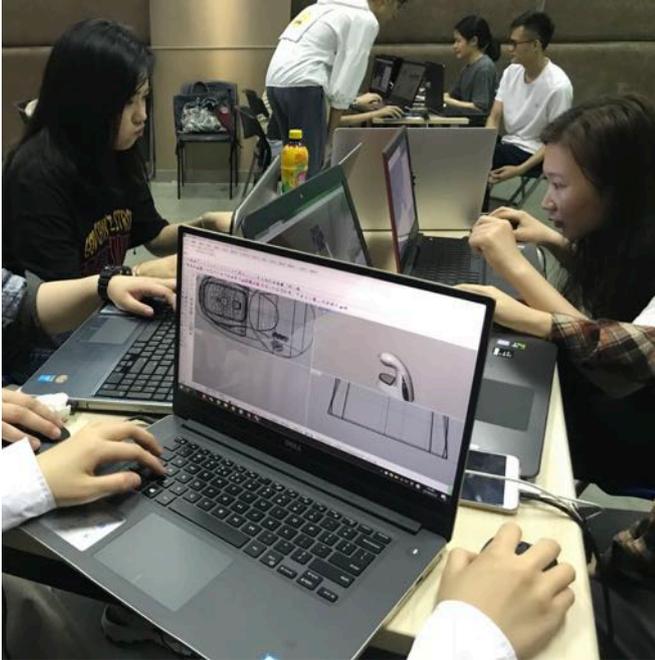
WORKSHOPS / 工作坊

ABOUT THE WORKSHOPS

As part of the exhibition programme Sean Clark ran a series of workshops with GDUT students looking to develop digital arts skills. The focus of the workshops was generative image making; interactive lighting; and web-based virtual reality.

关于工作坊

作为展览项目的一部分，Sean Clark与广东工业大学的学生一起开展了一系列的工作坊，目的是培养学生的数字艺术技能。工作坊的主要内容是图像制作、交互式照明和基于Web的虚拟现实。

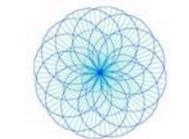
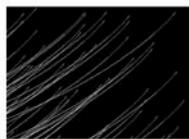
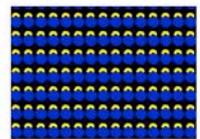
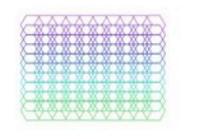
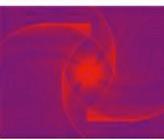
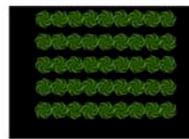
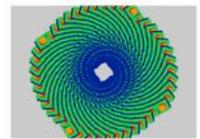
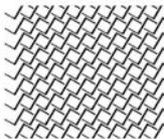
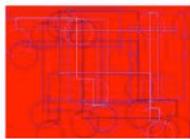
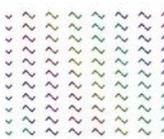
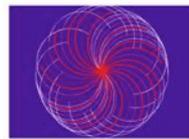
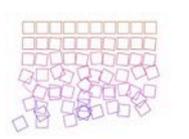
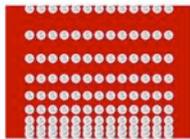
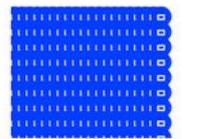
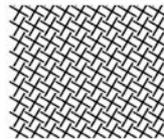
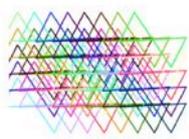
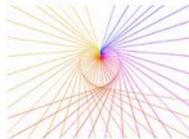
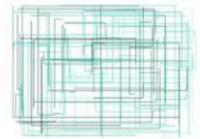
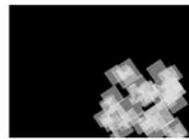
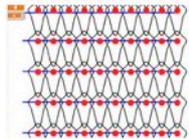
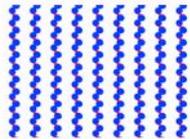
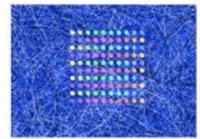
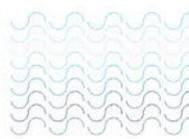
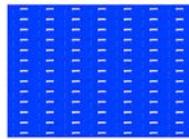
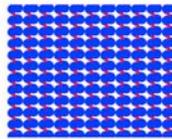
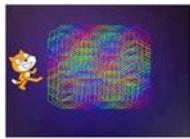


ALGORITHMIC IMAGES

The first two workshops dealt with the creation of algorithmic images using the Scratch programming language. All students in the workshops had not previously coded and were first shown some basic elements of digital image making. These included: the geometric creation of polygons; rows, columns and grids; and repetition with dynamic variables. Examples of early computer art from the CAS Collection at the V&A was used to illustrate these principles. The work created by the students was surprisingly varied and illustrates how art can be used in the teaching of programming to non-programmers.

算法图像

在展览前的两个工作坊学生们使用Scratch算法语言创作了一些算法图像。所有学生都没有接触过编程，在工作坊中只被授之以算法图像的基本操作。其中包括了：几何参数的建立；行、列和表；变量的重复使用。在V&A 的CAS Collection的早期计算机艺术的例子被用来作为讲解原理。同学们接收授课的结果出乎意料的好，创作的图形多种多样，这也证明了艺术对于编程授课是有作用的。

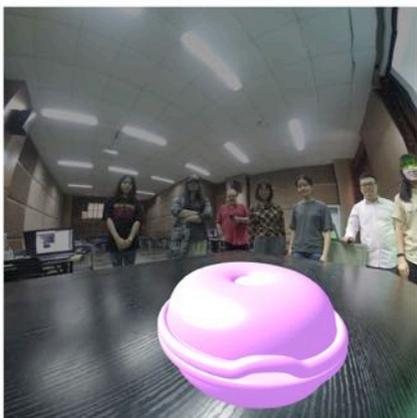
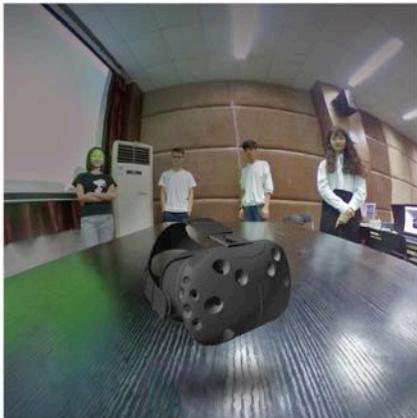


VIRTUAL REALITY

Workshops three and four explored web-based Virtual Reality. We found that all attendees had knowledge of basic 3D modelling and were therefore shown how to import their models in to a Virtual Reality environment. Their models were then placed inside photospheres to give the illusion of the models being positioned on a table in front of a panoramic group photograph of the students. Using a stereoscopic viewer the models could be viewed in 3D from all directions. The photospheres were then combined in to a single Virtual Reality experience that was made available for viewing on an HTC Vive at the exhibition opening, and on Google Cardboard at all other times. One of the goals of these sessions was to show that Virtual Reality content creation need not be as complicated as some might think.

虚拟现实

第三节和第四节的工作坊探讨了基于Web的虚拟现实技术。我们发现所有的参与者都具备基本的3D建模知识，因此向他们展示了如何将模型导入到虚拟现实环境中，然后将他们的模型放置在光球内，使得模型有种被放置在一张全景式集体照片前面的桌子上的错觉。使用立体观察器可以从各个方向以3D的方式观察模型，然后将这些光球整合到一个虚拟现实体验中，在展览开幕时可以在HTC Vive或是Google Cardboard上观看。这些工作坊的目标之一就是表明虚拟现实的内容创作并不像有些人想象的那样复杂。



INTERACTIVE LIGHTING

The final workshops involved the use of Arduino to create interactive lighting artworks. Students learnt how to programme the Arduino microcontroller and connect it to WS2812 LED pixels. The students were then taught how to make a version of Sean Clark's artwork "A Colloquy of Glass Jars" – a light and sound artwork made of multiple, interconnected parts. This work was then shown in the exhibition.

交互式照明

最后的工作坊涉及使用Arduino创作交互式照明艺术作品。学生们学习如何编程Arduino微控制器并用其来控制WS2812 LED 灯珠，然后学生们将会去展示如何制作Sean Clark的艺术作品“A Colloquy of Glass Jars” – 一种由多个相互关联的电子部分组成的光声艺术品，这件作品也会在展览中展出。





23rd April - 13th May 2018

729 Art Cafe
School of Art and Design
Dongfeng Road Campus
Guangdong University of Technology
CHINA

展览时间：2018年月4日 23日-5月 13日

展览地点：广东工业大学艺术与设计学院729艺术展厅