SCM | ACIM RESEARCH

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From left: Panel discussion with Derek Curry, Jennifer Gradecki (Assistant Professors, Northeastern University) and Theresa Reimann-Dubbers (Artist)

ISCMA scholars and artists visited *Algorithmic Art* as the conference *Art Machine*'s finale

Machine Learning expert Gene Kogan presented the use of Artificial Intelligence and New Media Art in his talk

DEAN'S NOTES: ART MACHINES AT SCM

For twenty years now the School of Creative Media at City University of Hong Kong has been pioneering an educational curriculum in which artistic and creative practice is embedded within and informs student engagement with science and technology, especially computer science. This is reflected in the entire curriculum, but most especially in our BSc program jointly taught with Department of Computer Science, and in our innovative and interdisciplinary Bachelor of Arts and Science curriculum, founded by Dr. Hector Rodriguez. We are firmly committed at SCM to a STEAM curriculum in which artistic practice informs and is informed by science and technology (the STEM subjects).

Both to celebrate the 20th anniversary of the school and to advance our educational and research program, SCM hosted two major events in January 2019, a conference entitled *Art Machines: International Symposium on Computational Media Art* and an exhibition at City Hall, Hong Kong, curated by Dr. Linda Lai, entitled *Algorithmic Art: Shuffling Space and Time*, with sponsorship from LCSD, the Innovation and Technology Fund, The Croucher Foundation, the U.S Consulate General in Hong Kong and Macau, and CityU Cultural and Sports Committee. Art Machines, was a pioneering interdisciplinary conference between computer scientists, computer artists, philosophers, and art historians, which, following a proposal by Dr. Rodriguez and Dr. Tomas Laurenzo, focused on

the revolutionary implications of machine learning for art and media design. *Algorithmic Art* was an opportunity to showcase for a broad public the history of computational art in Hong Kong and the wide Asian region, as well as the works of SCM faculty and alumni.

Art has always been closely connected with technology. As Lai's exhibition, which featured the work of pioneer Chinese artist Tsai Wen-Ying, showed, people have been making computer art for many years. However, with the emergence of machine learning something seems to have changed, a change marked by the widely reported responses to the selling of a "work of art" generated by machine learning protocols at Christie's auction house for a large sum of money.

The challenge posed by this rapidly evolving field to the idea of creativity are twofold. First, artists are using algorithmic technologies that they do not understand but that strongly influence the scope and direction of their work. Second, the outputs of the computer, which are not predictable in advance, threaten to eclipse human creativity. Both questions were addressed and debated in several presentations. The conference sought to understand the nature of the creative practices afforded by computational media, brilliantly theorized by Dominic McIver Lopes, one of the leading aesthetic philosophers of his generation, and to engage with

the remarkable range of creative projects that already exist using machine learning, which the conference showcased.

At the core of *Art Machines* was a dialogue staged between scientists and artists. Hong Kong based scientists, Professors Huamin Qu and De Kai from the Hong Kong University of Science and Technology, and Dr. Jing Liao and Dr. Rosa Chan from CityU, presented their cutting-edge research on machine learning. Chan presented in the context of the student led forum, *Open Systems*, organized by Ashley Wong and Marianna Perez-Bobadilla, which was another conference highlight. Machine Learning Artists from around the world presented their pathbreaking work. These included Gene Kogan (who led a summer school at SCM on Machine Learning and Art attended by over 150 people), Memo Akten, Anna Ridler, Jennifer Gradecki, Derek Curry, Phillipe Pasquier, and Theresa Reimann-Dubbers, as well as the pioneer computer artist, Ernest Edmonds, who first theorized interactive art back in 1973.

One of the conference highlights was a robotics symposium featuring Dr. Ayanna Howard of Georgia Institute of Technology,

a robotics innovator and entrepreneur (named by Business Insider as one of the 23 most powerful female scientists in the world), and Ken Rinaldo of The Ohio State University who has long been a leading figure in the creative innovation of interactive robotic sculptures. Robots brings emotion to the machine, and for Dr. Howard the question is how humanized robots that can foster human welfare. Rinaldo on the other hand creates uncanny robots, half-animal, half-machine, that can inspire a whole gamut of emotions from fear to love. Rinaldo works at the intersection of electronic art and bioart, a fascinating and growing field of increasing importance to the Bachelor of Arts and Science Program at SCM and featured in other conference panels, as well as a conference keynote by Professor Katja Kwastek.

Such was the enthusiasm for the conference and the accompanying exhibition from the conference attendees, that the organizers were urged to make Art Machines into a permanent institution on the academic calendar. So expect Art Machines 2 (!) once the Dean and his over-worked staff have had the chance to take a break from conference organization.

ON THE COVER:
The Dream Machine (2018) by Dream Team L306D, young graduates from SCM

Flipbook Camera Lucida, 2018, detail

Flipbook Jukebox, 2018, detail

F-stop Disk Camera, 2016, detail

Glass Plate Viewer, 2018, detail

Stereo Flipbook Viewer, 2018, detail

TAMAS WALICZKY: ANIMATOR
## REPRESENTING HUNGARY AT 2019 VENICE BIENNALE

Waliczky leads the animation program at the School of Creative Media. "I started animation when I was 9 years old. Then I started to paint when I was a teenager and discovered computers a few years later," says Prof. Waliczky when asked if he describes himself as an "animation and new media artist." In 1982, he started to work with one of the first game design studios in Hungary: "These were very basic games but I learnt a lot from the very talented mathematicians that I worked with. This was my day job and at night I worked on animations and my paintings. Hungary was a rather isolated country at the time and the borders were closed. Information was controlled very strongly and it was not easy to produce independent exhibitions and films and literature. However the computer was new media and nobody was controlling it yet so I found a free channel to focus on my artwork. I didn't have a political message but just wanted to do what I like. I was so excited about the computer. I stopped painting and concentrated only on the new possibilities of the computer. Then I sent my works to the Ars Electronica Festival in Austria, which was close to Hungary, and to my surprise I got a prize so my career began. I got an invitation to ZKM

Germany and that was a fantastic place where I met Jeffrey Shaw who eventually brought me to SCM."

Since he has been at SCM, Waliczky has completed several major art projects. One is a new media installation, a real time computer simulation called *Wheels*, in which Waliczky simulated a living universe with its own rules. Bodies float through space and interact with one anothers' "gravitational fields," either joining as they collide or repelling one another. A second project called *Homes* was funded by a GRF: "Using digital visualizations to preserve local cultural heritage, case studies of Tai Ping Street homes in Tai O." It was also supported by a Drs. Richard Charles & Esther Yewpick Lee Charitable Foundation Grant. This virtual reality project, realized with the help of students of SCM, rendered Tai Ping homes in meticulous hyper-realistic detail and allowed the user to navigate the re-created environments. These works were exhibited at Animamix Biennale, ISEA 2014, Lumenvisum Gallery, ISEA 2016, Siggraph Asia 2016, Hong Kong and Macao Visual Arts Biennial and the University of Applied Art Vienna.
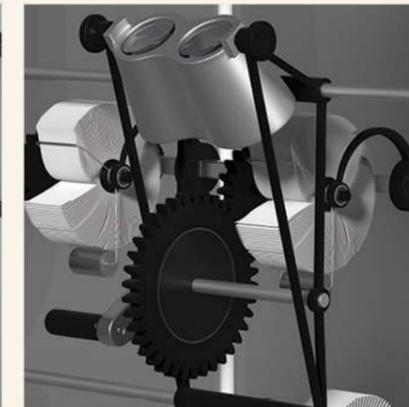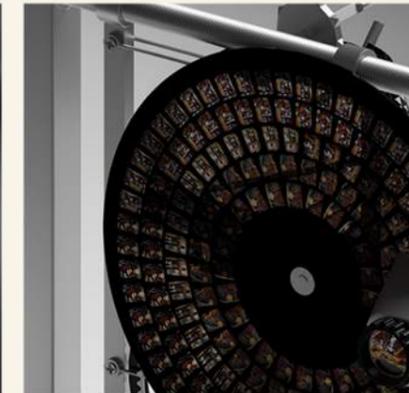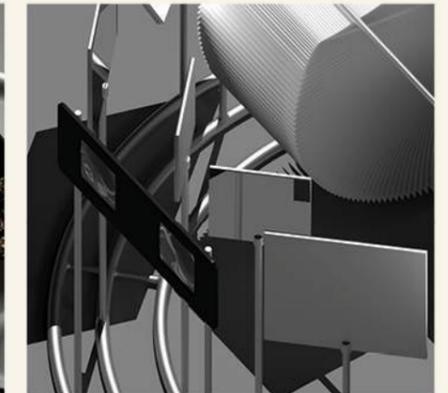
Waliczky's latest project is *Cameras*, which he began making in 2016. It was launched to the public in a solo show at SCM in Spring 2018 and was staged more recently at the photo gallery Lumenvisum in Hong Kong. Waliczky also exhibited his work at the Macau Photo Art Fair and at the Ani Molnar Gallery in Budapest. As a result of the warm reception this exhibition received and Waliczky's sustained contribution to digital media art over the last twenty years, he was bestowed the extraordinary honor of representing Hungary at the prestigious Venice Biennale where he has the opportunity to stage *Cameras* in a very expansive gallery space.

Cameras combines high resolution digital graphics and 3D animations and in each iteration of the exhibition Waliczky changes the configuration and the content, though at Venice he has the opportunity to stage the project in a complete form. Waliczky's digital graphics depict imagined cameras– cameras that were never made but might have been made– in meticulous and high-resolution detail. Often fanciful, for example, a camera made from flip cards, they are

nonetheless technically accurate and rendered in compelling, even haunting detail.

They trace an itinerary that is at once highly personal, his intimate association with and love of this creative recording machine, and at the same time coldly objective, reimaging the analogue, handmade past through the digital tools of the present. Waliczky says that, "The *Cameras* exhibition was trying to make a point that if we were to change the way the camera was made the images taken would be different and we would get a different viewpoint of the world. It's very interesting to see how we humans see the world, and how we record the world."

Prof. Waliczky's works have won numerous international awards, including the Golden Nica of Prix Ars Electronica, Linz, and they are placed in several major public collections including the Centre Georges Pompidou (Paris) and the Ludwig Museum (Budapest). For most of his exhibitions Waliczky works closely with his wife Anna Szepesi as his artistic advisor.

SCOTT HESSELS: ART AND ENVIRONMENT

Scott is a researcher and artist who focuses upon the speculative design and fabrication of systems that engage the relationship between moving images and the environment. He explains his research focus in this way: "I'm interested in relocating the moving image, so I create films and animations that are powered by natural forces or reacting to environmental changes or data. Lately my work has been sculptural, but I've used programming and film in the past. I'm an artist who works across multiple platforms."

Hessels has two ongoing GRF grants; one for physical displays of aerial traffic and the other for mediating new materials. He has been visualizing the movement of aerial technologies for 15 years. He says, "Every industry tracks its own assets--the space program knows where all the satellites are, the aviation industry knows all the planes. However, as more private and commercial players enter our airspace, it's causing collisions and dangers. I've been using art to find solutions on how to represent the entire technosystem--from drones all the way to space debris." Hessels is also exploring the transformative effects of Smart Materials. He is looking at whether the emerging class of reactive and adaptive materials can become a type of low-energy display.

Hessels says, "Nearly all my work is related to climate change, over-development and sustainable solutions. I'm deeply connected to nature and protecting natural resources. I believe an artist must also be a citizen, using our unique tools to help and educate about the endangered environment." He is well-known for his imaginative series of works called *Sustainable Cinema*. These are large scale kinetic sculptures that power media archeological devices, like the zoetrope or the shadow play, through natural energy. These have been exhibited and written about extensively in major venues and publication sites.

Scott is a pioneer in teaching and curriculum innovation whose work has been at the forefront of City University's Discovery Enriched Curriculum since he arrived at the university. He has obtained three teaching grants and a Teaching Excellence Award. Through his innovative and committed teaching methods he has maintained an average teaching score of 6.4, which must place him in the top percentile of the University.

Scott's first major curriculum innovation is "Extreme Environments," an art-based field research programme. Since 2012, Extreme Environments has been partnering SCM students, and students drawn from other departments at CityU, with scientists at field stations in remote ecosystems. Interdisciplinary student teams collect data and return to interpret their findings as new media artworks, game applications, interactive cinema, and photographic and video installations in public exhibitions.

Hessels has produced and led art and science expeditions to Antarctica, the Mojave Desert in California, cave networks in Vietnam, and The Solomon Islands. For many of the students who participate in the Extreme Environments project, it is a life-transforming experience. Hessels explains, "We went to the Solomon Islands in 2017 and our students assisted in the hatching and survival of the endangered hawksbill turtles. Our partner was The Nature Conservancy, an amazing dedicated team of scientists. Another team of art students was trained by the State Key Laboratory of Marine Pollution to learn diving and made art underwater. Each expedition offers unique depth of insight into each ecosystem."

Scott's second curriculum innovation is his so-called "Skunkworks" project developed in collaboration with Tobias Klein. Skunkworks, modelled on an innovation concept developed in the aircraft industry by Lockheed, allows students to create innovative and unique artifacts using smart and adaptive materials that react to their environments.

Student projects from this class were displayed to wide acclaim at the recent International Society for Electronic Arts Conference at SCM, and the class may now join the other dynamic making studios that are central to the Bachelor of Arts and Science program.

Scott is currently offering an experimental course centered on big data visualization in collaboration with the Hong Kong Observatory and The School of Energy and Environment. "Extreme Weather" will be creatively visualized and offer solutions for disaster recovery. This promises to continue the path of teaching innovation he began when he arrived at the School.
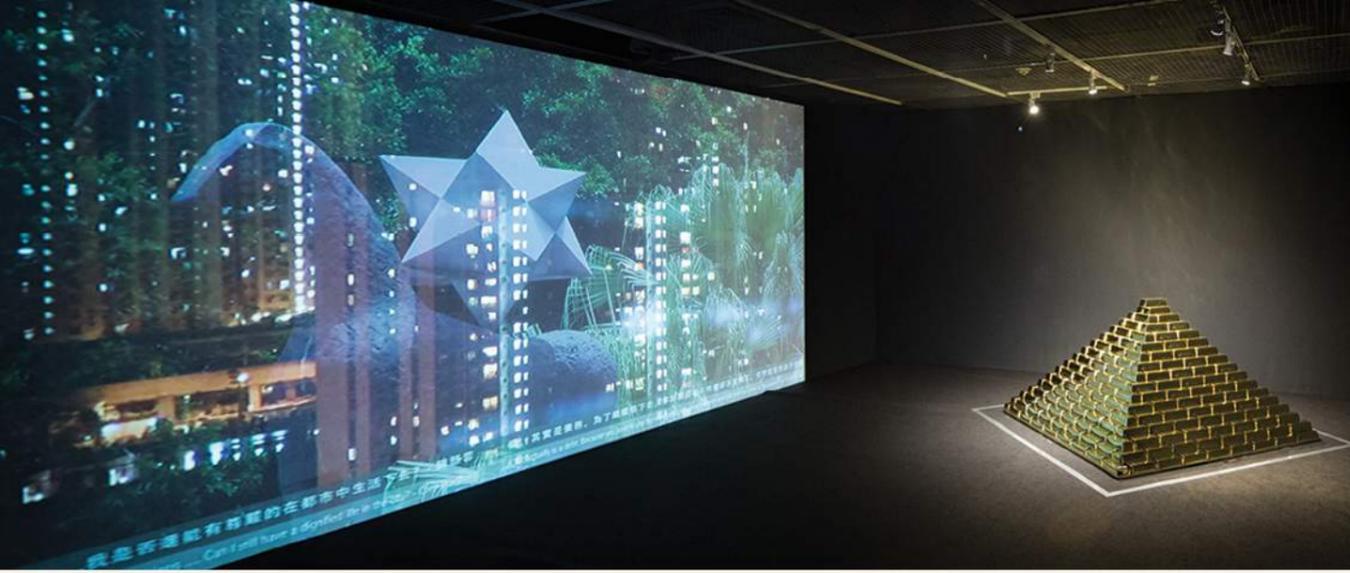
PHOEBE MAN:
SOCIALLY ENGAGED ART

Dr. Phoebe Man specializes in creating art that addresses social issues by engaging audience participation in art-making and building audience response into the content of her work. This kind of art practice has many names, "participatory art," "community art," "relational art," "dialogical art" and even "new genre public art," but she likes to call her work "socially engaged art." She builds most of her works from personal stories, such as searching for a studio, which then serves to encapsulate the broader social issue, in this case, housing problems. The works are then "completed" by the audience who are given the means to respond to the work or contribute stories of their own. The focus of Man's work is less the finished product but the process of its creation and the open discussions with the audience that take place during its creation. Man says, "It is the interaction with the audience that is most interesting for me. I started to fall in love with making art with the audience in 2012. Every time I make a new art work, I think of some new ideas to engage the audience."

Her art has addressed many important issues such as sexual assault, rising property prices, and comfort women in World War II, that resonate with many people. "I guess I was attracted to socially engaged art because of the opportunities it offers in terms of collaboration and interaction with people, mutual knowledge, mutual support, mutual empowerment, selfless give away, free expression and tolerance for differences. It emphasizes empathy and social justice. It is also a pursuit of virtue and beauty. In the process of art making, I personally feel changed and feel empowered. I do not know whether my works can make any positive social change. It is very difficult to make positive social change. However, as the ancient Chinese philosopher Laozi said, a journey of a thousand miles begins with one step. It is good to take the first step," she says.

Man recently completed the "Free Coloring If I Were" project in her studio in Fo Tan, which was a response to the #metoo movement near the end of last year. "Hong Kong has experienced a backlash within online communities to the #metoo movement that really surprised me and I wanted to do something about it." The intention was to create empathy by having the participants respond to the three main "positions" of the agents in a situation of potential predatory behavior: "If I were a victim," "If I were a perpetrator" and "If I were a bystander," by filling in an outline with colors. Man explains that "there were both positive and negative emotional responses during the coloring process but what was important is that there was a discussion." Man will turn the works of the participants into a video work.

In March this year, Man created an augmented reality art project *A and How are you?*. This is a commissioned public art project for the Augmented Reality Public Art Initiative at The Hang Seng University of Hong Kong and the Heritage Discovery Centre, Kowloon Park. Here she engages with the students to make AR art to express their views on the stress of getting an "A" and the pursuit of excellence. In addition to participatory artworks such as the augmented reality project, Man uses art workshops to encourage communication and interaction to overcome stress and anxiety, generate discussions about social issues, and explore different aspects of students' own personalities and expectations.

Dr. Man is the co-founder of Para/Site Art Space and was for some years Director of Asian Experimental Video Festival in Hong Kong. She has curated Hong Kong experimental videos programs for Asian Experimental Video Festival in Macao (2017, 2015, 2011), Over View (2014-15), Kuala Lumpur Experimental Film and Video Festival (2011), Videotage in Hong Kong (2011), EXIT 2010: Experimental Media Festival in Taiwan and EXiS: Experimental Film/Video
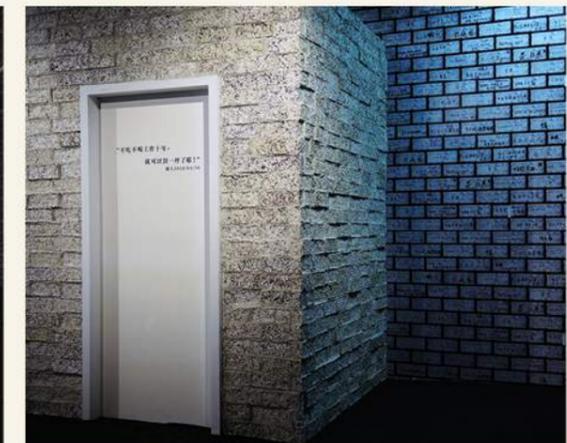
Festival in Seoul (2009). She has also curated exhibitions *Making the Familiar Unfamiliar @ Hong Kong Park* in 2009, *Playground* for Kao Yuan University in Taiwan in 2006 and *Wo Man: Feminine Art Exhibition* for Old Ladies House in Macau in 2001. Her book Phoebe Man's Socially Engaged Art was published in 2017 to discuss nine works which were made in recent years. Her articles about Hong Kong experimental media have been published in ArtAsiaPacific magazine in 2016, Film Appreciation Journal in Taiwan in 2010 and Contemporary Art and Investment in Mainland China in 2010.

Man's animations, videos and installations have been shown at over a hundred and eighty exhibitions and festivals internationally, including in Barcelona, Seoul, New York, Taipei, and at the Shanghai, Venice, and Gwangju Biennales. She was selected to be one of the four international artists to join the Wapping Project Berlin Residency in 2017 and has won awards and scholarship from the Hong Kong Independent Short Film & Video Competition, Hong Kong Arts Development Council, Asian Cultural Council, Hong Kong Museum of Art, and Philippe Charriol Foundation.

Golden Calf, 2018, By Jeffrey Shaw

A-Volve, By Christa Sommerer and Laurent Mignonneau
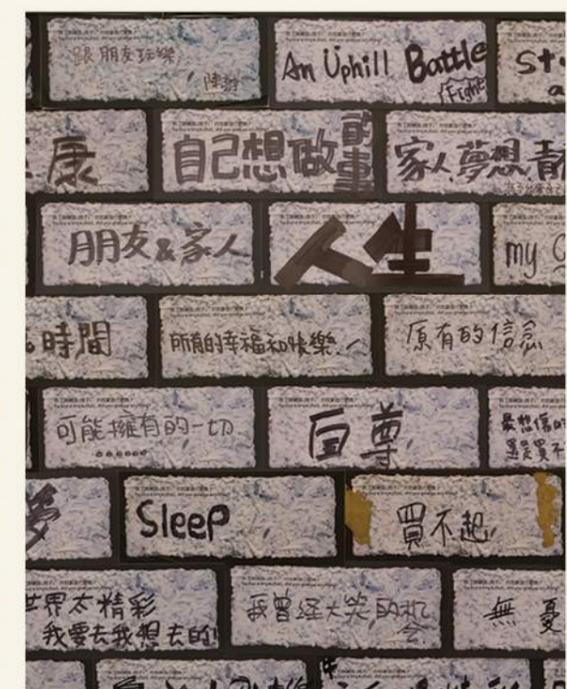
ANIMAL

Prof. Jeffrey Shaw and the National Palace Museum (NPM) in Taipei collaborated to present the "ANiMAL: Art Science Nature Society" exhibition, featuring animals from different historical eras and geographic contexts. The exhibition opened on 16th October 2018 at CityU Exhibition Gallery I 18/F, Lau Ming Wai Academic Building, and runs until 20 January 2019. The exhibition is the third collaboration between CityU and the NPM, following the "Rebuilding the Tong-an Ships New Media Art Exhibition" in 2015 and the "Giuseppe Castiglione - Lang Shining New Media Art Exhibition" in 2016.

"ANiMAL: Art Science Nature Society" brings to the Hong Kong public a fascinating blend of old and new, classical and modern, and traditional art and high-tech creative media. It joins the NPM's rich Chinese painting and sculpture collections with some of the latest artistic media techniques developed at CityU's School of Creative Media as well as some canonical works of digital media art.

It showcases various representative animals from different eras, using ultra-high-resolution facsimiles of the NPM's Chinese classical art treasury, digital and interactive installations, projection mapping, augmented and virtual reality, movies, photographs, sculptures, paintings and music. It comprises works by more than 40 Chinese and international artists, including historical and contemporary pieces, and collaborative works from various galleries, collections and institutions.

Also presented at the exhibition is One Health research from the Jockey Club College of Veterinary Medicine and Life Sciences at CityU, which shows the growing threats to animal life posed by climate change, environmental degradation, disease transmission, and other dangers. The exhibition inspires visitors to increase their respect for animal sentience.

Professor Shaw's goal was to present an exhibition that would approach the animal world from a multiplicity of perspectives, through art, science, nature and society and to use new media to engage both adults and children alike in that world. He says that ANiMAL is "… a multi-dimensional exhibition that brings together traditional media forms, new media art and cutting-edge technologies to inspire visitors' curiosity, surprise and appreciation when encountering its relational narratives." Among the many highlights are *The Lion* by Liu Chiu-Te, originally completed in the Qing dynasty; an immersive interactive theatre called *Marvels within the Sea*, which illustrates *Album of Sea Miscellany* by Nie Huang, a biologist and painter from the Qing dynasty; and the 3D-printed bones of an Omura's whale, which visitors could interact with.

Building on the treasury of animal-related artworks in the collection of the National Palace Museum, the ANiMAL exhibition seeks to weave together our multifarious interactions with the animal domain into a compelling narrative. This narrative is expressed in an innovative design that delineates and binds together five main chapters: Encylopaedia, Compendia, and Scientific Inquiry; Auspicious Symbols and Homophonic Puns; Mythical Creatures and Bestiaries from Fantasy to Manufacture and the Popular Imaginary; The Harmony and Disharmonies of Animal and Nature, and Revisioning Animal Identity in Contemporary Art. In Shaw's words: "We are members of the animal domain, and by understanding them we better understand ourselves. Their presences have suffused and enriched our existence and imagination since earliest times, and this is given shape in the renderings of art and science."

Following its debut in Hong Kong, the ANiMAL exhibition will be showcased at Taichung City Seaport Art Centre in Taiwan from 26 January to 5 May 2019.
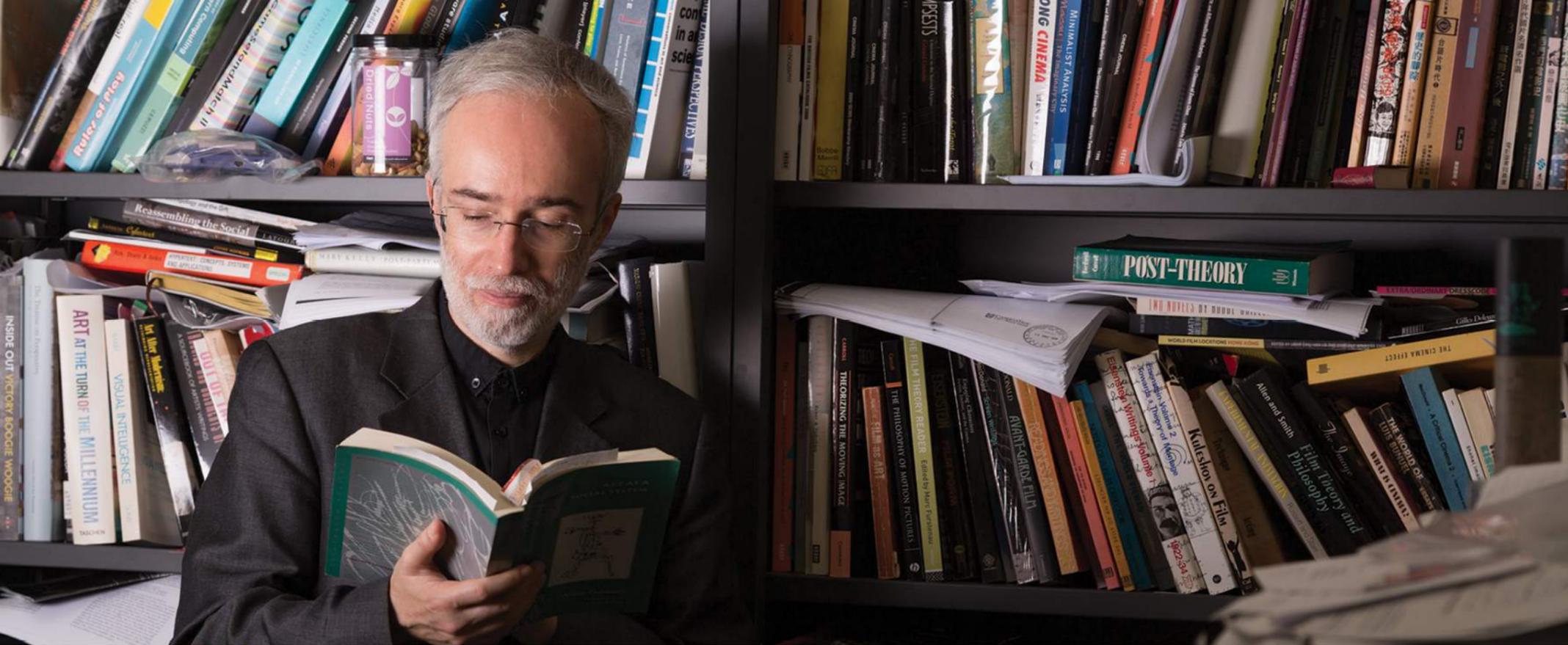
Gestus Redux (1918), single-channel video installation.

Theorem 9 (1918), three-channel video installation.

HECTOR RODRIGUEZ: SOFTWARE ARTIST
ACIM RESEARCH FELLOW

A founding member of the School of Creative Media, Dr Hector Rodriguez is currently an ACIM Research Fellow exploring the computational analysis of movement in film and video, and dimensionality reduction in computer vision and machine learning. Rodriguez is an experimental interdisciplinary software artist. His work investigates the specific possibilities of information technologies to reconfigure our experience of moving images and also our relation to film history. He integrates visual art with mathematics and computer science, exploring the tension between visual representation and digital abstraction.

Rodriquez did not begin as a software artist. He hails from the Canary Islands, Spain, took an undergraduate degree in film and liberal studies at the New School for Social Research, and obtained a PhD in Cinema Studies from NYU. His dissertation was a study of Taiwanese cinema. When he joined the School of Creative Media as a film scholar he became fascinated with the digital image and taught himself advanced mathematics and coding. Talking about his research Rodriquez says, "The one topic that I'm very interested in is looking at how our society is to a very large extent governed by algorithms. This theme is present in all of my work. Art is a model of public engagement with algorithms. The artist opens the black box and finds alternative ways of using these technologies."

Rodriquez designed the Bachelor of Arts and Science Program at SCM which implements a bold hypothesis of what an education in Arts, Science, and Technology should be like in the 21st century. Over the last 20 years he has developed and successfully taught a large number of highly innovative courses in the field of digital media and computer art including Software Art, Generative Art, New Media Art: Theory and History, Game and Play Studies, Critical Theory and Participatory Art, Visual Studies, and Interdisciplinary Practices in the Arts, Sciences, and Humanities. It is striking that throughout years of curriculum innovation and challenging curriculum content, Rodriguez has maintained his TLQ at 6 or above. He has won both the SCM Service Award (2017) and the SCM Teaching Award (2018).

Rodriguez's digital prints and video installations have been widely shown at international art venues including the WRO biennial (Wroclaw, Poland), the Saatchi Gallery (London, England), the Friedericianum Museum (Kassel, Germany), Gwacheon National Science Museum (Seoul, Korea), Siggraph Asia, the Loop Video Art Festival, and elsewhere. His animation *Res Extensa* (2003) received the award for best digital work in the Hong Kong Art Biennial 2003. He has also published several significant theoretical essays about games/play studies, film and philosophy, and film history.

Rodriguez's most recent exhibition was a solo show at Sheung Wan Civic Centre and it was a great success. "I got really interesting reactions to my work. I wanted people to get a sense of my whole trajectory, as I have only exhibited my work individually in the past. My installations *Approximation theory*, *Theorem 9*, and *Z* are connected to the idea of dimensionality reduction, so there is a link between all of these works. I also introduced a research room in the centre of the exhibition space, which displayed my books, papers, and handwritten notes to reveal the process of creating these works and show the interdisciplinarity of my work between cinema studies, computer science, math and physics," he explains.

His latest work *Gestus Redux* (2018) is a thoroughly revised version of his earlier installation *Gestus: Judex*. The *Gestus* project consists of a custom software that analyzes the movements of source videos in a database, identifying sequences that contain similar micro-movements and rendering them side by side. *Gestus Redux* was also shown at the exhibition and Rodriguez recalls how a young student noticed how the movement in each of the images was all in one direction, which her teacher didn't realise. He says, "I was very impressed. I think we have been brainwashed by story driven cinema to think that the narrative is more important than the visual quality of film movement." Gestus: Judex, was first presented in ISEA 2011 and at SCM in 2012. It has been subsequently shown in various festivals around the world, received an Achievement Award from the Hong Kong Contemporary Art Awards and was a Jury Selection at the Japan Media Arts Festival.

Rodriguez admits his work is not always easy to understand. He says, "My works are not didactic so the mathematical principles behind the work are sometimes implicit, and therefore my works can be difficult to understand. But I like to activate the audience cognitively. For instance, several viewers who visited the show tried to understand the working principles behind them and figure out the logic that underpins them. This is the sort of response that makes it worthwhile for me to continue producing art."

Rodriguez will present his most recent work, Errant: The Kinetic Propensy of Images, in the upcoming exhibition *Algorithmic Art: Shuffling Space and Time* at the Hong Kong City Hall. This work, which brings together his early research on Chinese cinema with his current interest in computation and mathematics, employs machine learning techniques to analyse movement in the films of King Hu.

RUOHAN LI

Ruohan's doctoral research at SCM focuses on the Internet celebrities phenomenon (Wanghong) on social media in mainland China. By using a mixture of research methods, Ruohan's doctoral research aims at framing the ecological system of Chinese Internet celebrities from several key perspectives: (1) how does *Wanghong* attract others' attention on social media; (2) how does *Wanghong* sustain the generated attention through time; (3) how does *Wanghong* maintain an intimate relationship with their followers; and (4) how does *Wanghong* achieve business success by means of social media.

RUAN LINGYAN

Lingyan Ruan's PhD research at SCM is in the area of computational photography, three-dimensional (3D) display and human-computer interaction (HCI). Her previous researches focus on developing novel 3D displays (automultiscopic display and super multi-view display) without wearing glasses or head-mounted devices. Currently, she is exploring the potential of accommodation and vergence of eyes to enhance the existing eye-tracking technologies and contribute to hands-free interaction and assistive applications. Her works have been presented at Eurographics and ACM SIGGRAPH ASIA. She was awarded "The Outstanding Academic Performance Award for Research Degree Students" in the academic year 2017-2018.
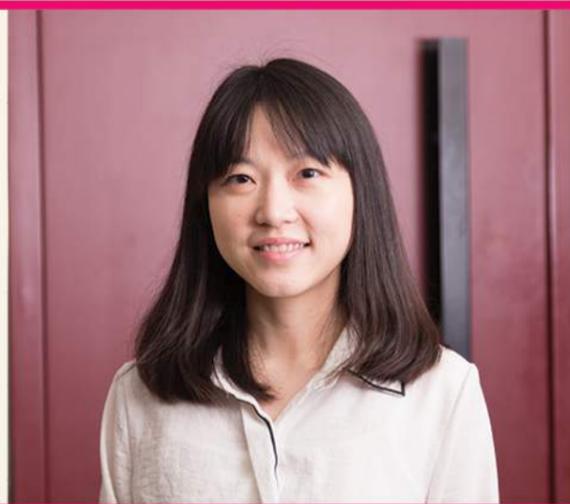
CARLOALBERTO TRECCANI

Carloalberto Treccani is a PhD candidate at SCM and an artist. His research investigates how machine vision is affecting human vision. More broadly he is interested in how technology affects human perceptions and emotions. His artworks have been exhibited in group and solo exhibitions and commissioned by galleries and institutions. He says, "Since I was a child I had the need to understand how things worked and to try and understand the mechanisms that regulate them, breaking them up to the point of no return. Needless to say, my parents weren't always happy with this curiosity of mine. Today my work as a researcher and artist explores the systems of visual languages, their strategies, grammar and elements. "

OUTSTANDING ALUMNUS: MAHBUBANI VIVEK ASHOK

Vivek is a full-time Hong Kong-bred bilingual stand-up comedian performing in both Cantonese and English. His parents originate from Mumbai in India, and Vivek handled the challenges of growing up as a minority in Hong Kong, where people were often surprised to learn that he was fluent in Cantonese, by turning potentially awkward situations into a joke with a well-chosen turn of Cantonese phrasing. In this way his career as a comedian was born on the streets of Sai Ying Pun where he says he remembers "walking through the streets as a kid passing all the dry seafood stores and occasionally enjoying a free sample of some dried shrimp along the way."

Having been crowned the Funniest Person (in Chinese) in Hong Kong in 2007, followed by his victory in the English category at the Hong Kong International Comedy Competition in 2008, he has had the opportunity to take his sense of humor all over the Asia Pacific including Mainland China, Macau, Singapore, Malaysia, Manila, Bangkok, Sri Lanka, India and Australia. He began as a self-employed web designer after he graduated from SCM but slowly transitioned from web designer by day and comedian by night, to full-time comedian.

He obtained his Bachelor of Arts in Creative Media (BACM) in 2015. Reminiscing about his days at SCM he says, "SCM gave me the chance to not only explore different creative outlets but also experiment with different creative forms to better understand what I liked. It wasn't just about fulfilling assignments and getting good grades, it was about finding my own way to get the job done. This taught me that at the end of the day, it wasn't about walking one path or another, it was finding my own way to make progress in my life." He returned to SCM in 2016 to be our graduation speaker and naturally enough he brought the house down.

Most recently, Vivek was awarded the "Ten Outstanding Young Persons Selection" award in 2018 which is a flagship project founded by Junior Chamber International Hong Kong ("JCI Hong Kong") in 1970. With regard to this achievement he says,"It is an absolute honor and a form of encouragement by society to tell me that what I do is significant. Some might see what I do as basic as telling a joke, but this honor reminds me that a simple laugh can have a big impact on the world around you."

SCM BSc
TRAINING A NEW GENERATION OF COMPUTER SAVVY MEDIA PROFESSIONALS

"Back in the early 2000s," says CityU Vice-President Horace Ip, "SCM already had a strong BA program in Creative Media, training a new generation of artists who were savvy in the application of media technologies for the creative industries. However, it also became clear that there was a need to train a new breed of creative technologists who could develop new computing tools and digital media technologies for the creative industry." To this end, Professor Ip, and Professor Liu Zhi Qiang who led the initiative, proposed the creation of a BScCM programme that was approved by CityU Senate in 2005 to address the important need of training professionals with proficient skills in media arts and computer technology.

The BSc programme, which is jointly offered by SCM and the computer science department, was the first collaborative programme of its kind in Hong Kong. The curriculum integrates core areas in digital media design and computer science, which serve to bridge the gap between the creative and technical sides of the media field. As SCM Associate Dean, Hongbo Fu says, "BScCM students take fundamental technology-oriented courses from the Department of Computer Science and learn the applications of such technologies to computer games, animations, interactive installations etc. at the School of Creative Media. This unique curriculum forms a solid foundation for students to explore innovative applications in the digital media field."

For both sets of faculties, collaborating on the BSc program has been a learning curve that requires, negotiation, collaboration and a will to succeed, as Professor Ngo Chong Wah points out, "In the past few years we have been struggling to learn how computing science training should integrate with learning media art, these are two monsters living in different academic landscapes. But we have a common goal which is to nurture students who have talent in arts to be strong in a technical sense, and have mastery of computer programming. Looking back, it is amazing to see so many IT startups from BScCM students, demonstrating the unlimited opportunities for innovation when you establish a playful ground for science and arts to rendezvous."
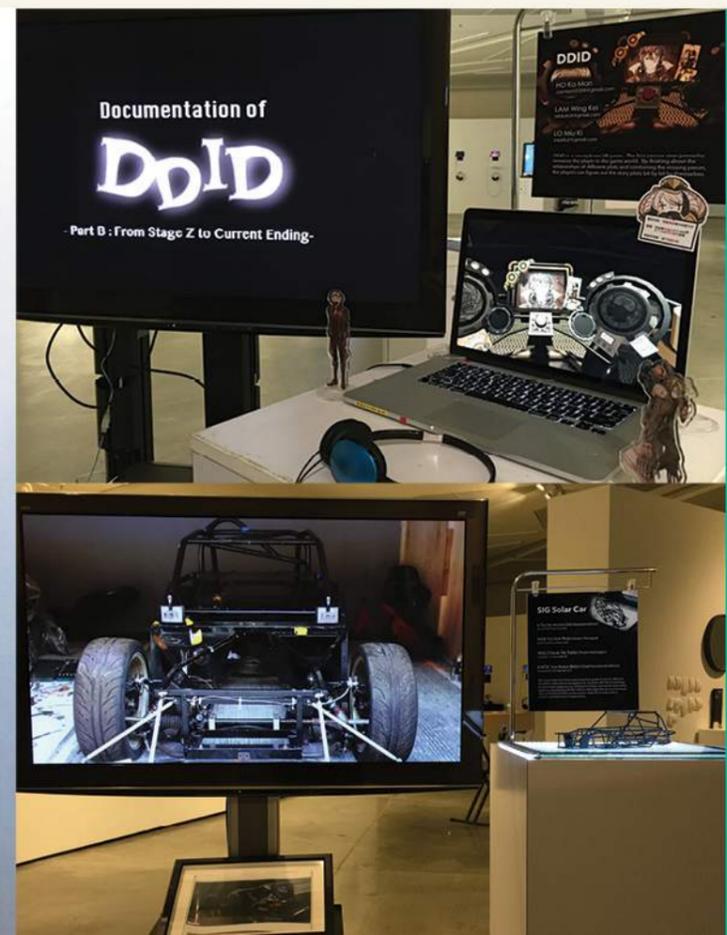
A central feature of the BSc program, as Dr. Fu notes, is that "our students are encouraged to continue their creative journey outside the classroom." SIG (Special Interest Group), a student-centred platform for collaborative projects, was founded in 2006 by Professor Liu with the goal that "through participation in supervised extracurricular, professional research and development activities in the Groups, students can gain in-depth learning experience and build up excellent portfolios." SIG seeks to develop close to commercial strength media products, entrepreneurial skills, interdisciplinary collaboration and industrial outreach. SIG student works have been widely recognized by the professional communities/industries and have won many awards, locally and internationally, for example, at Hong Kong ICT Awards, Global Game Jam, and SIGGRAPH Asia. Current BSc director, Yim Chun Pang, has been instrumental in forging relationships with the creative industries upon which the success of our students depend. He says, "The rigorous training and cross disciplinary teaching approach we have in the programme enables our students both to collaborate with different partners and to address the end users' needs."

The BSc boasts many outstanding alumni. These include Wing Ho Andy Li (BScCM 2010), the first BSc graduate who went on to receive a PhD and is currently a senior researcher at TCL Research, Hong Kong; Tony Kwok (BScCM 2014), founder of Megatoni Productions and creator of the Toni.Mk3D camera; Laura Dan Li (BScCM 2011) who is now a UX Designer at Microsoft in Seattle; Chris Cheng (BScCM 2011) and Vincent Chan (BScCM 2011), co-founders of Juicyapp; David Chung (BScCM 2013) and Carmen Lam (BScCM 2013), founders of Animae Productions, who were featured in a previous issue; and most recently, Harsh Agrawal (BScCM 2017), character shading maestro and part of the Pixar team who won an Oscar for *Coco* as Best Animated Feature in 2018.

The BSc programme has recently been strengthened by several new initiatives. We have implemented a new admissions model that allows us to target entering students with Math skills and ensure the right fit to the program. This has already yielded positive results in student aptitude. We have recruited a number of new faculty at SCM with high level computer science skills. And we have worked to make the curriculum more flexible and adaptive to meet the needs of both computational literacy and excellence in media arts. We look forward in anticipation to the future.

MANFRED LAU

Manfred Lau joins SCM from Lancaster University in the UK where he has been an Assistant Professor in Computer Science. However, for Manfred, coming to Hong Kong is really a return home since this is where he grew up. Having lived for years in Canada, the US, Japan, and the UK, he is back in Hong Kong to share his knowledge and to continue his research. Last semester he taught Games Prototyping and Design, and this semester he will teach 3D Game Production and a Creative Coding course. "It's good to be back. I'm getting started with research and teaching here, while I have had to adjust to life in Hong Kong as I haven't lived here for a long time," he says when asked how his experience has been at SCM. "I have great colleagues and the students are very keen. Its been very positive so far," he adds.

His research is mainly in the areas of computer graphics and human-computer interaction. His research in the perception of 3D shapes uses crowdsourcing and learning methods for studying human perceptual notions of 3D shapes. His work in 3D mod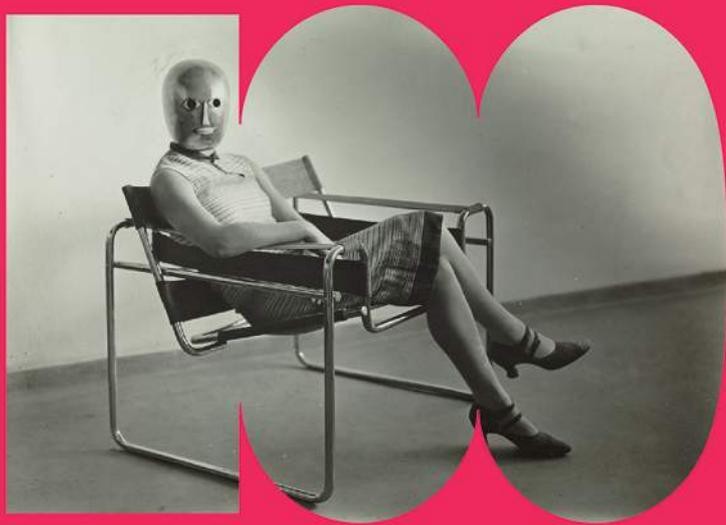eling and fabrication focuses on building natural user interfaces for the layperson to model, design, and fabricate their own products. His Ph.D. thesis work explored a combination of motion planning techniques and captured data to generate realistic crowd animation for games and films. When asked about his future research plans he says, "I look forward to continuing my research in 3D modeling and fabrication, and to collaborate with my colleagues here."

Manfred's work has been published at top-tier venues such as SIGGRAPH. His work in developing a mixed-reality interface for digital fabrication won a SIGCHI Best Paper Award in 2014. He has served in the program committees of major conferences such as SIGGRAPH Asia and Eurographics. He will be the Program Co-Chair of TEI (ACM International Conference on Tangible, Embedded and Embodied Interaction) in 2019. The School of Creative Media is delighted to welcome Dr. Lau back to Hong Kong and looks forward to his contributions to teaching and research in the coming years.

CAN LIU

The School is delighted to welcome Can Liu from University College London as one of our new faculty members. Can is a computer scientist whose work lies in the area of future interfaces of technology: "When everything is getting computerised we need to understand the interaction between humans and technology to facilitate what we are doing in our everyday lives, in our recreation, our conversations, our work, our learning and all our other interactions with technology," she says.

Her research goal is to rethink the whole paradigm of how we interact with technology: "I seek to develop future interfaces based on empirical understanding of human needs and behaviours. It's different from UI or UX because it is about fundamental changes independent from existing platforms such as desktop computers or smartphones. For example, if some walls in our co-workspace become displays, what can we use them for and how shall we interact with them? The keyboard and mouse restrict our movement, touch gestures are not optimal either. Furthermore, they should support collaboration." Research on large interactive displays formed the basis of her Ph.D. dissertation and her latest work develops novel voice-based interfaces. She plans to continue her research on designing and understanding cutting-edge technology at SCM.

Can also works with mobile augmented reality and deploys technology in local communities to connect neighbourhoodsand to understand how technology can augment real city space.

What is the role of technology and how does it trigger social interaction and collective interaction between people? Can says, "It can be used to connect people rather than disrupting people's lives. Generally the stereotypical image of a smart city is one of shiny buildings with no people in the picture, but we are trying to see how it can be beneficial for people to embed technology in public spaces" she says.

She has begun her career at SCM by teaching Physical Computing and she brings much needed expertize in this area to the school. In this course she has taught art students to create interactive art installations. She will be teaching Visual Communication and more advanced hardware hacking this semester: "So far I have had a really exciting experience. In terms of teaching the students are very curious and eager to learn. I was nervous because I'm teaching coding etc. and I thought the students might not be very interested, but when they are engaged with hands on tasks they are very interested and the workshop-based teaching style works really well with them," she says.

Overall, Can is very excited to be working in the inter-disciplinary environment of SCM: "I find that the school is very supportive and we have a great team so I get to have really interesting discussions with my peers as they have such a wide range of experiences coming from different backgrounds", she explains.

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Goethe-Institut
Hong Kong
April 10–May 31

Opening Hours: 11AM–6PM Daily
Venue: 9/F, Run Run Shaw Creative Media Centre
18 Tat Hong Avenue, Kowloon Tong

A cooperation of
Goethe Institut Hong Kong
School of Creative Media, City University of Hong Kong
University Museum and Art Gallery, The University of Hong Kong
with Klassik Stiftung Weimar – Direktion Museen
Organised by SCM MA students of 'Curating Art & Media'

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