

# HACKING KOWLOON EAST

Technology  
for  
Activating  
Urban  
Life



MIT | SA+P

MIT Hong Kong Innovation Node

Spring 2021

# HACKING KOWLOON EAST

FEB 17 - MAY 20, 2021

## INTRODUCTION

Even before the pandemic, digital technology were changing patterns of social and economic life in cities. With the growth of e-commerce and other digital platforms, urban experiences are increasingly mediated through virtual platforms.

While lockdowns have led to a diminishing of urban social life, this crisis also presents an opportunity to re-imagine how citizens relate to each other. Can technology play a positive role in bringing citizens together and helping more urban dwellers access social and economic opportunities? Planners and designers can help cities re-imagine what is possible in this “new normal”.

MIT SA+P, in partnership with the MIT Hong Kong Innovation Node, is proud to offer a “virtual design course” bringing students from Hong Kong and MIT together to address some of the challenges cities are facing now. Students are expected to participate in a January charette, held virtually and synchronously between Hong Kong and Boston. Throughout the Spring, the course will meet weekly. Students will be organized into groups, each focused on developing a master plan for activating a particular part of Hong Kong’s Kowloon East area, using both architectural as well as digital strategies.

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### ABOUT MIT HONG KONG INNOVATION NODE

The MIT Hong Kong Innovation Node is committed to building a community of students, entrepreneurs, universities, and businesses consistent with the MIT philosophy of Mens et Manus (Mind and Hand), for the benefit of all. Its mission is to:

- Enrich the educational experiences of MIT and Hong Kong students working together;
- Provide the Hong Kong community with new opportunities to study and practice methods of accelerated innovation; and
- Foster and champion innovation globally in academic, commercial, and social communities in Hong Kong and the Greater Bay Area.

The MIT Hong Kong Innovation Node is conducting an equitable assessment of activities in the workforce and small business developments in Hong Kong’s Kowloon East area (Kwun Tong District).

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# FACULTY AND PROGRAM TEAM

Brent D.  
Ryan



Associate Professor of Urban Design and Planning  
Head of City Design and Development Group  
Department of Urban Studies and Planning  
Massachusetts Institute of Technology

#InternationalDevelopment #Sustainability #TheoryOfUrbanism #UrbanDesign

Brent D. Ryan is Head of the City Design and Development Group and Associate Professor of Urban Design and Public Policy in MIT's Department of Urban Studies and Planning. His research focuses on the aesthetics and policies of contemporary urban design, particularly with respect to pressing issues like deindustrialization and climate change. Professor Ryan's first book *Design After Decline: How America rebuilds shrinking cities*, was one of Planetizen's ten best urban planning books of 2012, and his second book *The Largest Art: A measured manifesto for plural urbanism*, was published by MIT Press in 2017.

Professor Ryan has published research in the *Journal of Urbanism*, *Journal of Urban Design*, *Journal of Planning History*, *Urban Design International*, *Urban Morphology*, and the *Journal of the American Planning Association*, which awarded his article "Reading Through A Plan" its best article of 2011. Professor Ryan has contributed chapters to *The Companion to Urban Design*, *The City After Abandonment*, *The Oxford Handbook of Urban Planning*, and others.

Professor Ryan conducts urban design research and practice around the world, including China, Ukraine, Russia, Japan, and the United States. Current research includes a study of sustainability in Siberian cities, funded by the U.S. National Science Foundation and a study of principles for sea level rise adaptation in the coastal United States. Professor Ryan has consulted for the World Bank, Google, and the Armenian Tumo Foundation relating to cities, urban design, economic and demographic shifts.

Prior to joining MIT, Professor Ryan taught at the Harvard Graduate School of Design and the University of Illinois at Chicago, where he was also Co-Director of the City Design Center. Professor Ryan holds a B.S. in biology from Yale University, a M. Arch. from Columbia University, and a Ph.D. in urban design and planning from MIT.

Sing Yeung  
(Sunnie)  
Lau



Director of Smart City Research and Industry Collaboration  
MIT Hong Kong Innovation Node

#SmartCity #InclusiveInnovationForCommunities #UrbanPlanning  
#UrbanMobility #SmartInfrastructure #Architecture #Sustainability

Sunnie believes that human-centric design promotes inclusive communities with innovative sustainable design strategies and urban designers & architects play important roles within the built environment. As an international associate member of AIA, UK Chartered Member and Hong Kong Registered Architect, she has been a regular design critic and instructor at architecture and urban design programmes at various schools. Taking up the roles of both practitioner and educator, she has been promoting architecture by designing, exhibiting, writing as outreach, and engaging communities. The endeavors included publicizing ongoing research topic on Kowloon East Inclusive Innovation & Growth, urban research-oriented design seminar on "Urban Mobility and Smart Infrastructure", "Urban Resilience by Design - Adaptive Landscapes for PRD", and facilitating dialogue between professionals, academia and young members at various cross disciplinary platforms and institutions. She was Co-Curator & Exhibitor of the Hong Kong Shenzhen Bi-City Biennale Of Urbanism\Architecture (Hong Kong) 2017, 2019, Venice Biennale (HK) 2020-2021.

Sunnie graduated with a B.A in Architecture from University of California, Berkeley; and later on, obtained her Master of Architecture, and Certificate in Urban Design from M.I.T. Her international experiences began with renowned architectural practices prior to postgraduate study at the M.I.T.; she worked with Morphosis Architects L.A., MVRDV Rotterdam, on international competitions, cultural projects and large-scale urban developments. Her academic research focuses on smart city - Inclusive innovation for communities, urban design and technology, urban mobility and smart infrastructure, architectural and urban typologies with an interest in creative and innovative sustainable design strategies (SDGs).

## Sol Andrew Stokols



PhD Candidate  
Department of Urban Studies and Planning  
Massachusetts Institute of Technology

#UrbanPlanning #UrbanDesign #InnovationEconomy

Mr. Andrew Stokols is an urban planner/designer and researcher. He is currently a Phd student at MIT in the Department of Urban Studies and Planning. His research currently explores the relationship between the spatial aspects of the innovation economy, the relationship of urban design and innovation, and how cities can respond to the challenges of digital platforms that have profoundly reorganized urban life.

He graduated with a masters in urban planning at Harvard Graduate School of Design. His thesis explored the potential of urban network analysis to improve walkability and community in China's super block neighborhoods. Andrew has also been involved in research projects investigating various facets of global urbanization, particularly in China and Asia. As part of Neil Brenner's urban theory lab at Harvard GSD, Andrew investigated the confluence of the global logistics industry and China's "One Belt One Road" program in furthering urbanization in central Asia and western China.

# STUDENT PROFILE

## Master of Science in Urban Planning, Second Year University of Hong Kong

Teaching Assistant (Field Work & Survey), MIT HK Innovation Node

David Cheng has various experiences in urban planning related researches. He was a former research assistant of the Department of Urban Planning and Design of the HKU, participating in the research project "Spatial Age Segregation and Ageism: A Social Psychological Analysis of Age-specific Housing". In addition, the Community Planning Studio and Spatial Planning Studio has given him a lot of insight into the Kowloon District. The Baseline Report of the studio, which is about creating an age-friendly Kowloon City, was released to HK PolyU Design Institute for Social Innovation (DISI) for reference. Apart from a more macroscopic perspective, David is also interested in urban design. He has participated in some urban design competitions, such as the "HKIUD Greater Bay Area Urban Design Award".

## Chi Chiu Cheng (David)



Ava Hoffman



Master of City Planning, Second Year  
Massachusetts Institute of Technology

Ava is a second-year Master in City Planning student in the International Development Group and a research assistant with the MIT Displacement Research & Action Network. Her interests relate to land and housing rights — and organizing against evictions and displacement — in the context of mega-projects. Prior to DUSP, she coordinated research at Catalytic Communities in Rio de Janeiro and was a collaborating researcher at the New Social Cartography of the Amazon Project in Manaus, Brazil. Ava is originally from San Francisco and holds a BA in Comparative Urban Development Studies from Princeton University.

Master of Architecture, Third Year  
Harvard University

Tiange Wang is a M.Arch I candidate at GSD. She moved to Boston for graduate study after completing her undergrad in architecture at UC Berkeley. She has worked in Boston, San Francisco and Beijing. Her interest lies in the intersection between design and technology, data visualization and alternative forms of representation. Outside of her workspace she can most likely be found in the outdoors and the kitchen.

Tiange Wang



Geunhee Lee



Master of City Planning, Second Year  
Massachusetts Institute of Technology

Geunhee Lee is a UX designer and design researcher, currently studying in the MIT Department of Urban Studies and Planning. Highly motivated to research the digital transformation of governance and public information; focuses research on the dynamics of intentions and actions underlying civic engagement that lead toward networked social movement.

Master of Science in Architecture Studies(Design), First Year  
Massachusetts Institute of Technology

Joel Austin is a architectural practitioner and researcher from the UK. His independent projects explore experimental modes of practice that prioritize socio-technological agendas and have been selected for exhibition at Manifesta Biennale and the Venice Biennale of Architecture. Joel holds a Master of Architecture from the Royal College of Art and has practiced professionally in both Europe and Asia with the architecture office OMA. He is currently a SMArchS research candidate at MIT.

Joel Austin  
Cunningham



Kwan Queenie  
Li



Master of Science in Art, Culture and Technology, First Year  
Massachusetts Institute of Technology

Kwan Q Li is a Hong Kong interdisciplinary artist. Her research-based practice explores post-colonial intricacies and ideological alternatives within the neoliberal context. Former exhibitions include performance / lectures at the Ashmolean Museum, Oxford; the AI & Society Journal conference at the University of Cambridge; IdeasCity residency co-curated by NTU CCA and the New Museum. Queenie holds degrees in BFA (Ruskin School of Art, Oxon.) and BBA in Global Business Studies (CUHK). She is currently attending the Art, Culture & Technology graduate program at MIT on a teaching fellowship.

Master of Architecture, Second Year  
Massachusetts Institute of Technology

Born and raised in Seoul, South Korea, Yoonjae is pursuing a Master's degree in architecture at MIT. Her interest relies on future living styles and user-centered architecture, specifically fostering knowledge in design-sensitive and sustainable residences in urban areas. As a student, she is most interested in exploring how architecture outfits lifestyle changes. Before joining MIT, Yoonjae holds an undergraduate degree in Housing and Interior Design from Kyung Hee University. In her free time, she enjoys taking virtual tours worldwide and drawing graphic resources.

Yoonjae Oh



Adolphus Lau



Master of Science in Urban Planning  
University of Hong Kong

*\*External student, the team collaborator with Yoonjae Oh*

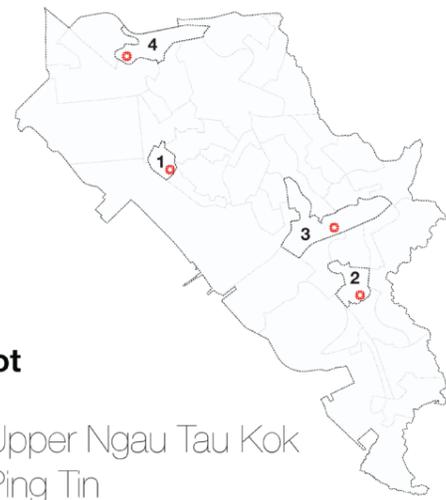
As a management consultant at Arcadis, a consultancy focusing on Smart City Development in Hong Kong, Adolphus is specialized in innovation policy planning and technology-business integration. He is also actively involved in advanced product development, with interests in new interfaces to improve quality of life. He obtained a masters in urban planning from the University of Hong Kong and a BA in Architecture from University of Toronto.

# STUDENT PROJECT SYNOPSES

## 01 Universal Access Fest

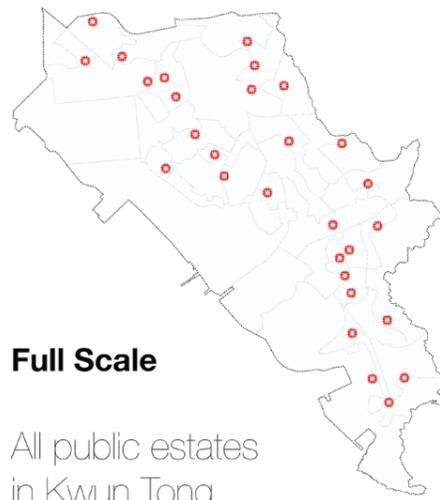
Ava Hoffman

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### Pilot

- 1 Upper Ngau Tau Kok
- 2 Ping Tin
- 3 Tsui Ping
- 4 Choi Tak



### Full Scale

All public estates in Kwun Tong



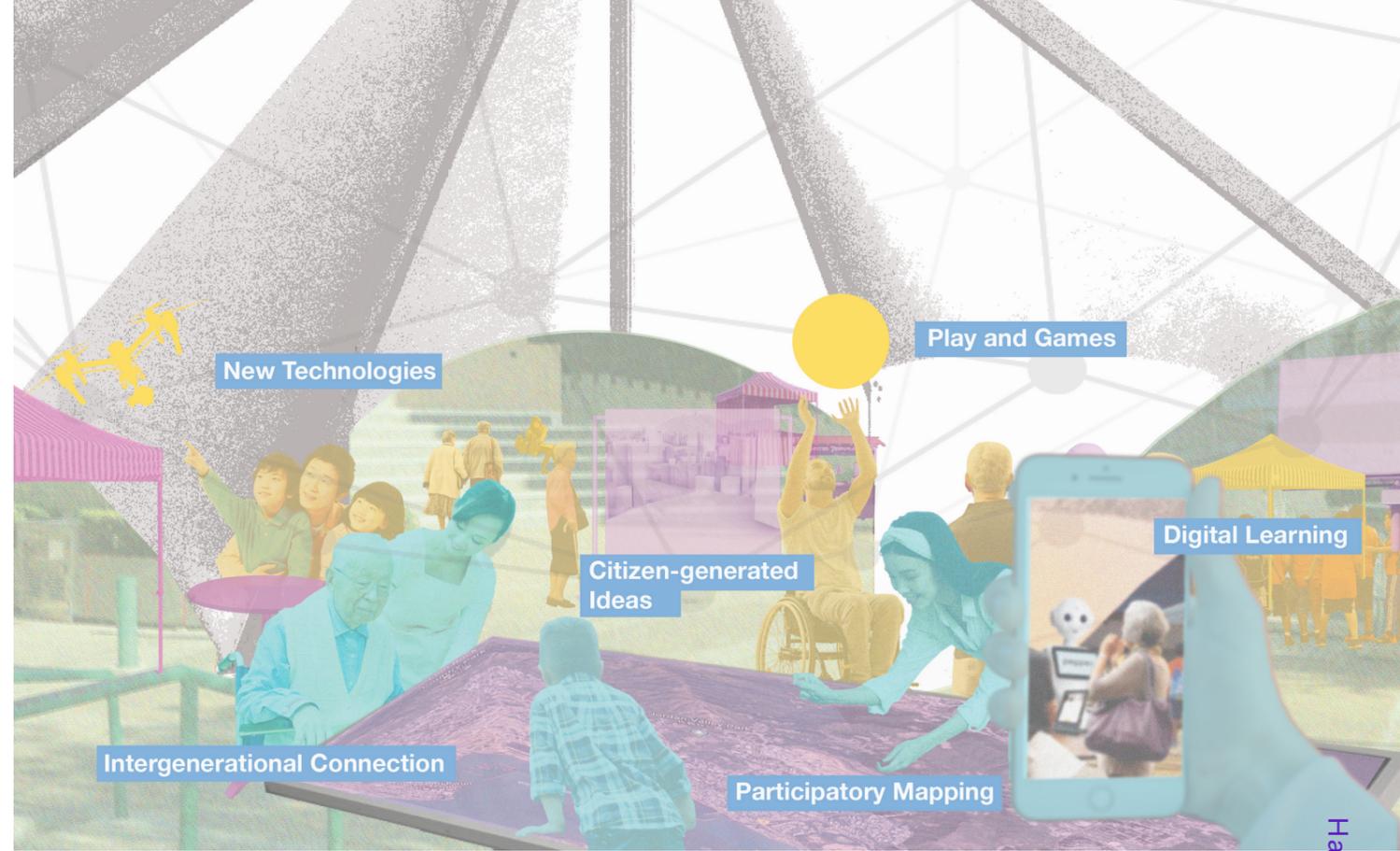
As Kwun Tong District experiences rapid transformation under the banner of transforming the district into a smart city, it's critical that we question, a smart city for whom? Who will have access to these new tools, technologies, and urban spaces — both virtual and real? And who will be left out?

### Question

How might we uplift local knowledge, promote dialogue, build community, and generate support for strategic action around physical + digital access?

### Concept

The Universal Access Fest is a toolkit for collaborative experimentation that leverages community networks, popular education, participatory planning, and technology to bring visibility to local challenges and mobilize support for accessibility projects. At its core, and where technology plays an enabling role, the Universal Access Fest aims to facilitate access to the smart city — learning to be smart, and deciding what kind of smart residents of Kwun Tong want their district to be in a collaborative and iterative way, ultimately moving the needle on who is included in the smart city vision.



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### Design

The Universal Access Fest envisions strategic pop-up interventions into public spaces surrounding public housing estates to incubate local dialogue and action around issues of physical and digital access in Kwun Tong. Festival programming would feature a range of opportunities to learn, plan, and play — from intergenerational tech tutoring and community mapping, to empowering design games and inclusive art, food, and music.

The festival's three pillars are learn, plan, and play. By incorporating elements of imagination into a typically professionalized environment, the Universal Access Fest aims to engage residents in a way that they feel part of the city-making process — equipped with the guidance to navigate processes of neighborhood change, voice concerns and aspirations, and participate in collaborative placemaking.

The long term goal of the Universal Access Fest is to realize Kwun Tong's potential as a model of inclusive, collaborative, and accessible urbanism. The proposed interventions work toward this goal by centering the voices of those least likely to be heard in traditional planning processes and promoting public

dialogue, knowledge-sharing, and the creation of collaborative tools and solutions. In this way, the festival is a medium for innovation while also working to strengthen and synergize the efforts of existing community networks, organizations, institutions, and collectives working to improve accessibility through elder-youth engagement, disability advocacy, urban planning, digital literacy, arts inclusion, and other avenues.



## 02 BlueBird

Geunhee Lee, Tiange Wang

Our project, Kowloon East BlueBird, envisions the integration of an interactive digital companion platform to promote the urban discovery for economic revitalization and community engagement of the Kwun Tong Business Area. The platform is an application that lives on both the web and mobile platforms to create a seamless experience of discovering the area as both a virtual and a physical city, from navigating on screen at home to walking on the street. The philosophy behind the project is to gather the district's business information scattered across social media and the internet landscape and reorganize them into a virtual city constructed around the logic of their geolocation.

The idea and concept of the project was motivated by our on-site research and user interview, in which we found that because of the physical conditions and changing occupancy of the industrial buildings in the Kwun Tong Business Area, there

are the demand and difficulty to have a stronger public presence for small business owners in industrial buildings, a negative wayfinding and exploration experience for customers, and an overall gap between planning efforts and the image of Kwun Tong in the mind of the public. The research and interview sets the goal of the project as increasing the presence of local gems hidden inside industrial buildings, enhancing the experience of navigation and exploration in dense vertical neighborhoods, and unleashing the historical, social and economic values of vertical spaces using smart technologies.

The target user groups of the application are small business owners and customers (locals, visitors, tourists) of Kwun Tong Business Area. For business owners, the application serves as a promotional channel where they will be able to customize and upload their advertisements that then become part of the visible infrastructure of



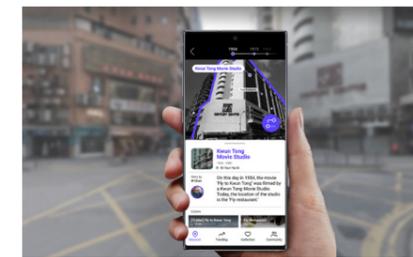
Hacking Kowloon East

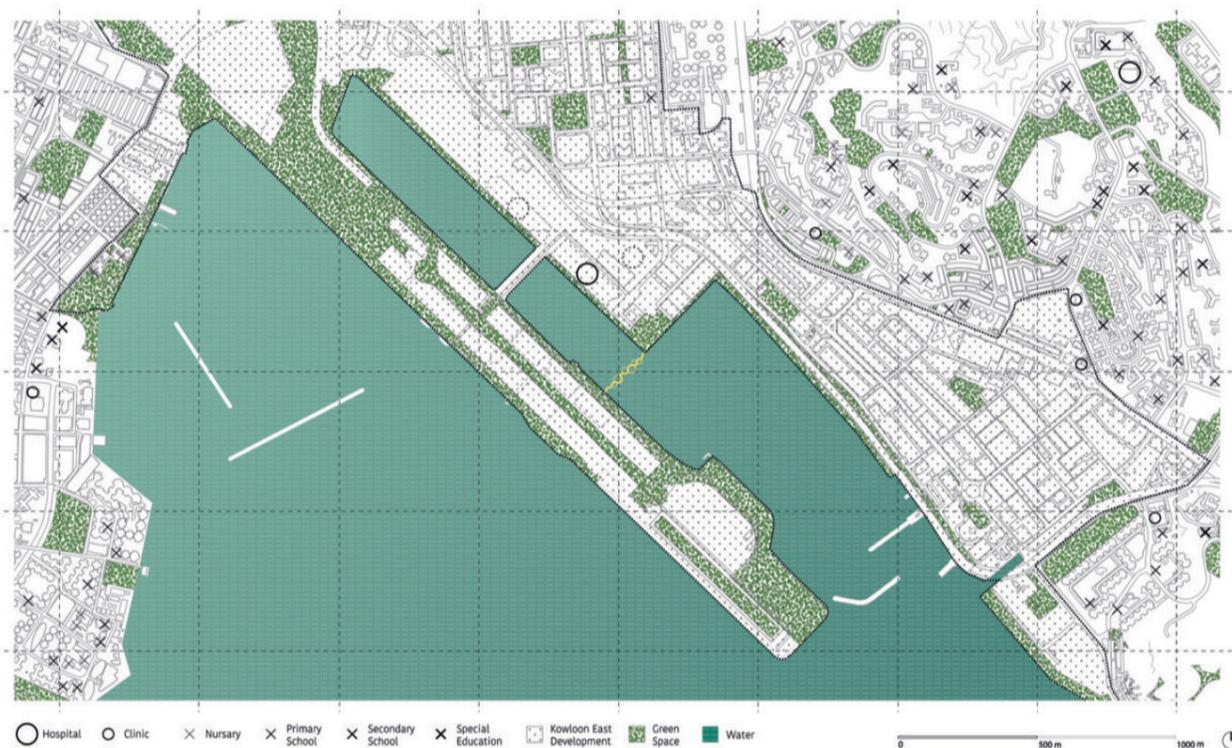
Hacking Kowloon East



the augmented city. The business owners will also be able to access the statistics dashboard associated with their space to understand real and virtual customer flows, sells and stock changes, and use this information to connect with their customers and provide better consumer experience. For customers, the application serves as an information platform and a spatial narrative tool. They will be able to search, orient and navigate themselves in space through an engaging 3D experience augmented by vision and/or sound. They will be able to stay informed about local information

through vicinity-based pop-up promotion along their way. They will also be able to "navigate" the area through time by learning about the rich spatial history of the buildings and contributing their stories to the legacy and community of the area. In these features of the application we take the stance of a futuristic optimism where we believe that in the future people will be able to interact with the senseable city through a variety of hardware devices including but not limited to screens, AR glasses, earphones, smart watch and smart textiles.





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Afloat is a multi-dimensional bridge that aims to reinforce the health of both humans and surrounding environment. The proposal is situated at the opening of the Kai Tak channel and connects the former runway to South Apron Corner, which is now the site of the first and only Children’s Hospital in Hong Kong and will soon be home to a new acute hospital which is scheduled to open in 2025.

Aligning with the latest governmental plan for a recently revised multi-modal transportation service for the district, Afloat offers more than a generic bridging solution. In this project the connotation of ‘bridge’ extends to a multitude of connections between people and the surrounding natural context, and aspires to resonate with the future strategic health zone of Kowloon East.

In an incremental approach, the only permanent component of the proposal is a footbridge that offers a new 200m walking route between

the green spaces of the Kai Tak runway and the centre of Kowloon Bay. The meandering form of the bridge then creates a series of pockets which can host a series of flexible and economically constructed floating structures. These installations can be specified to host a panoply of functions under a collective goal of improving the district’s health. These include human oriented spaces which promote an active lifestyle, enriching our cultural quests, and re-channeling the calming power of water for meditation and reflection. But they can also feature elements which look to improve the health of the natural environment and connect the local community to it. This can be achieved through devices that monitor and cleanse the water quality through biological intervention, or an art-tech element that visually communicates the monitoring of the water below with distant viewers, creating an inspiring atmosphere that extends to the residents of the broader neighbourhood, especially those located in the district’s hospital.



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The bridge has been designed to accommodate a wide range of floating structures which can be commissioned by local institutions and community groups. This form of participatory design not only responds to the evolving needs of the district, but continuously aggregates different local groups and engages them in reimagining the development of their social fabric. Serving a wide spectrum of users

from hospital visitors to general residents, this urban intervention strives to exemplify an understanding of health and accessibility in diverse formats: physically, sensorily, and sustainably. For Kowloon East, this bridge provides an infrastructure that not only connects the community, but allows it to grow, change and stay afloat in dynamic waves.



- SMALL LOCAL BUSINESSES**
  - ☀ Increase business exposure (Online + Offline)
  - 👤 Enable stronger brand identity
- VISITORS**
  - 📍 Improve wayfinding
  - 🛒 Enable shopping-friendly psychology

## 04 xyZ

Yoonjae Oh , Adolphus Lau\*  
 \*External student, team collaborator

Kwun tong is known to be one of Hong Kong's poorest districts. Kwun Tong is also known as one of the coolest neighborhoods, and it is part of many generations' precious collective memory. However, due to the reinvention of this area and the ongoing redevelopment plan in Kowloon East, industrial buildings have become objects of investment, and the theoretical threat by the government to dispossess owners in case of land use violations has gained. Today, locals fear a possible eviction and a complete erasure of their local history and existent culture as new high-rise buildings replace the land.

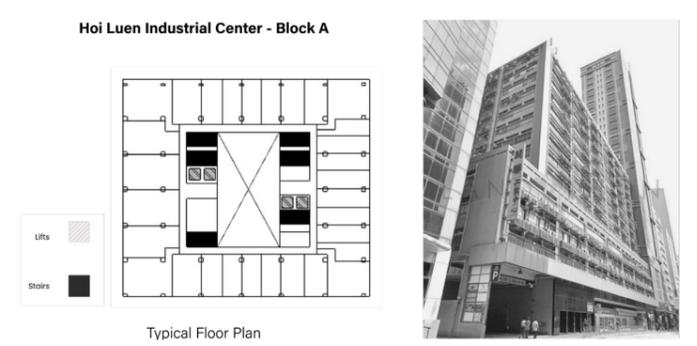
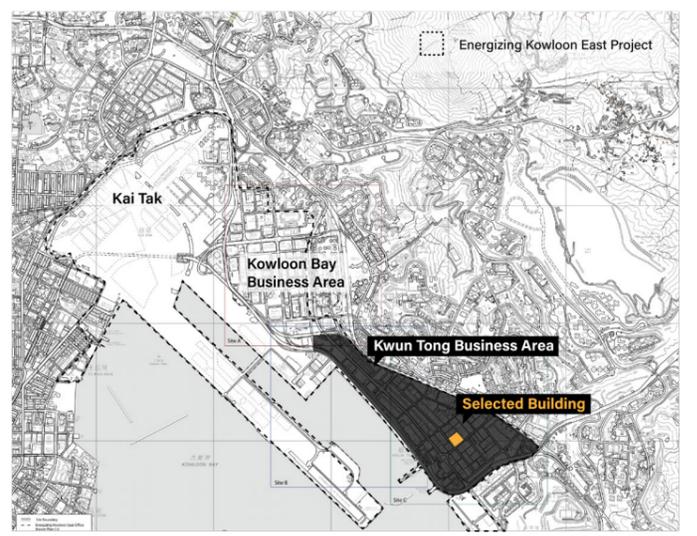
With this background, the idea of xyZ emerged starting from asking the question: How might

we empower Kwun Tong's local businesses more sustainably and innovatively to create an inclusive society?

While urban redevelopment may be inevitable to improve the city's image and deal with the safety problems caused by old buildings, the xyZ team thinks Hong Kong's heritage is the shopkeepers' livelihood, and it must be preserved in Kwun Tong redevelopment. Thus xyZ aims for two goals:

1. enhance spatial orientation in vertical indoor environments
2. preserve the urban heritage of Kwun Tong District

The concept of xyZ is an indoor way-finding app that uses an Augmented Reality (AR) character to guide users to facilitate interaction between small business owners and visitors of industrial buildings. xyZ incentivizes locals to discover hidden local small businesses located at industrial buildings and help businesses to gain awareness from the locals. Beyond strengthening the connection between locals and small businesses, xyZ also aims to provide a social, inclusive, and enjoyable experience to the locals with features such as store search, indoor navigation, real-time store news center, and chat service. With xyZ, city dwellers will be the co-creators of Kwun Tong's evolution and be part of the journey of preserving its urban heritage, the shopkeeper's neighborhood.



# REVIEWERS

Final Review, May 20, 2021

Amy  
Cheung



Head of the Energizing Kowloon East Office of the Development Bureau (EKEO), HKSAR Government

Ms. Amy Cheung is currently Head of the Energizing Kowloon East Office (EKEO), a multidisciplinary office set up under the Development Bureau of the Hong Kong SAR Government. EKEO is responsible for facilitating the transformation of the old industrial areas at Kowloon Bay and Kwun Tong together with the Kai Tak Development into a vibrant and attractive second core business district of Hong Kong. She is a town planner by profession and has a long working experience in the public sector.

Ms. Cheung's experience covers strategic planning and major planning studies, including "Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030", as well as planning and engineering studies for new development areas such as Kwu Tung North/Fanling North, Hung Shui Kiu/Ha Tsuen and Yuen Long South.

Associate Professor of Urban Science and Planning,  
City Form Lab, DUSP, MIT

Andres Sevtsuk's work bridges city design, active mobility and spatial analytics. Andres is the author of the Urban Network Analysis toolbox, used by researchers and practitioners around the world to model pedestrian flows along city streets and to study coordinated land use and transportation development along networks. He has recently published a book entitled "Street Commerce: Creating Vibrant Urban Sidewalks" with Penn Press and "Urban Network Analysis: Tools for Modeling Walking and Biking in Cities" with Tianjin University Press. Andres has collaborated with a number of city governments, international organizations, planning practices and developers on urban designs, plans and policies in both developed and rapidly developing urban environments, most recently including those in US, Indonesia, Estonia and Singapore.

Andres  
Sevtsuk



Constance  
Bodurow



MIT SMArchS, MCP '91  
Founder and Director of studio[Ci] LLC

Ms. Constance Bodurow is Founder and Director of studio[Ci] LLC, a transdisciplinary design collaborative based in Detroit, MI USA. She is an urbanist with 25+ years of professional practice and 17 years of teaching experience, holding master's degrees from the MIT School of Architecture and Planning. Her award-winning design and research focus on net zero energy beyond the building; generative uses for vacancy; and equitable hybridized infrastructure networks. Ms. Bodurow has received numerous design awards and been PI for grants from US Department of Energy and other funders. Her service is focused on mentoring and empowering the next generation of urbanists.

MIT SMArchS Urbanism '19  
Founder of CIVIS Design and Advisory LLC

Ms. Helena H. Rong is an urbanist and designer working at the intersection of design, technology and urban research. She is currently a PhD student at Columbia University, focusing on digital city applications and civic engagement. She received her Master of Science in Urbanism degree from MIT and Bachelor of Architecture from Cornell University. Ms. Rong works as a Research Associate at the MIT Real Estate Innovation Lab, where she leads the "Value of Design" research pillar. Previously, Ms. Rong was a researcher at the MIT Senseable City Lab, where she led the development of a travel optimization model to museums in Amsterdam using autonomous boats. Ms. Rong is the founder of CIVIS Design and Advisory LLC, an interdisciplinary design and research practice based in Boston.

Helena H.  
Rong



Kwok Cheung  
King



Deputy Head of Energizing Kowloon East Office (EKEO)  
Development Bureau, HKSAR Government

Mr. Kwok Cheung KING joined the Government of HKSAR as an Architect in 1995. Since then his career has been closely associated with a wide range of public works projects, like institutional buildings, cultural facilities, heritage conservation works and open space developments. Assumed the post of Deputy Head of Energizing Kowloon East Office of Development Bureau in Jan 2021, Mr King takes on the new challenge to transform Kowloon East from an old industrial area into a new CBD to support the long term economic development of Hong Kong.

In private capacity, Mr. KING is also a member of Board of Directors in Hong Kong Architecture Centre and was Committee Member in Hong Kong Institute of Architects on Heritage & Conversation and Planning & Urban Design, giving advices on issues related to conservation and urban design.

## Mengqi (Moon) He



Master of Science in Architecture Studies (SMArchS) in Architecture and Urbanism '20

Ms. Mengqi (Moon) He is an architectural and urban designer. She received her Master of Science from MIT and Bachelor of Architecture from the University of Southern California. During her time at MIT, she has gained interdisciplinary experience from projects on architectural and urban design, resilience, smart city, and multimodal transportation systems. Her graduate thesis investigated the impact of river restoration on urban space and culture and proposed a participatory design method with transmedia storytelling. Previously, She has worked at the MIT Senseable City Lab, junya.ishigami+associates, and Preliminary Research Office. She was one of the initiators and the teaching assistant of the Hacking Chengdu course in 2019.

HKU PhD '14 & M.Sc. in Conservation '05

Dr. Rosman C.C. Wai is a lecturer in the Architectural Conservation Programme, Faculty of Architecture, The University of Hong Kong. She is a registered architect and has worked in the Hong Kong Housing Department for many years. She was the Vice-President of the Hong Kong Institute of Architects during 2015-16. She has published many articles on public housing, and has been interviewed by various newspapers, television and radio stations, and has been given talks and lectures in many local and international conferences and universities. Her book, "Design DNA OF Mark I - Hong Kong's Public Housing Prototype" has won the 10 Best Architectural Book of the year by the DAM (Deutsches Architekturmuseum) Book Award 2020.

## Rosman C.C. Wai



## Sean Kwok



MIT B.Sc. in Architecture and Design '97 & MArch '01  
Senior Architect / Director of Design  
at Arthur C.S. Kwok Architects & Associates, Ltd.

Since graduating from MIT, Mr. Sean Kwok honed his craft practicing as an architect in the U.S., Hong Kong, and China. He has designed in a wide range of scales- from building components to urban developments, as well as different types, such as art installations, building interiors, luxury houses, schools, hotels, and a convention center.

As an architect, Mr. Kwok is trained to analyze problems logically, technically, critically, culturally, and creatively; to think in 5 dimensions - x, y, z, time and cost; to effectively communicate ideas verbally, literally, graphically and physically; and eventually discover innovative solutions to highly complex problems that are elegant, efficient, functional, user-centric and beautiful. He believes that Architecture's holistic non-linear design approach can have great relevance and broad application in other disciplines in today's complex world.

## Sherman S.L. Yip



Chief Architect/Development and Standards  
Hong Kong Housing Authority

Dr. Sherman S.L. Yip is an architect by profession, a Fellow of the HKIA and past Chairman of its Continuous Professional Development Committee. His research interests lie in the knowhow of professionals' tacit knowledge and its related Community of Practice. Sherman also has over 25 years of experience in architectural design, project management and contract administration in the private and public sector. He is also member of Technical Committee on Design Manual: Barrier Free Access under Buildings Department, ex-officio member of the Technical Committee on Design and Construction Requirements for Energy Efficiency of Buildings under Buildings Department, member of CIC Committee on Environment, advisor to HKGBC Green Labelling Committee, member of Liaison Group meetings on Noise Mitigation under Environmental Protection Department and member of Working Group for promotion of Universal Design under Hong Kong Joint Council for People with Disabilities.

Executive Director, MIT Sustainable Urbanization Lab  
Director, China Future City Program, Lecturer, MIT

Zhengzhen's research and teaching expertise is focused on the transitioning urbanization, digital innovation and entrepreneurship, digital transformation in real estate sector. She is the editor of "Towards Urban Vibrancy: Patterns and Practices of Asia's New Cities" (MIT SA+P Press, 2020), and the author of the digital cities chapter in this book. She is also the director of MIT-Tsinghua Future City Innovation, which is MIT's first entrepreneurship education program with a focus on the urban tech sector. She is now teaching two MIT courses in School of Architecture and Planning, and the Sloan School. Before joining MIT, Zhengzhen was an urban planner and urban designer with extensive practice in both public and private sector around in Shanghai, Singapore, London and Vancouver. She got her bachelor degree from Department of Urban Planning, Tongji University, Shanghai and her master degree from Department of Architecture, National University of Singapore.

## Zhengzhen Tan



# KOWLOON EAST WORKSHOPS

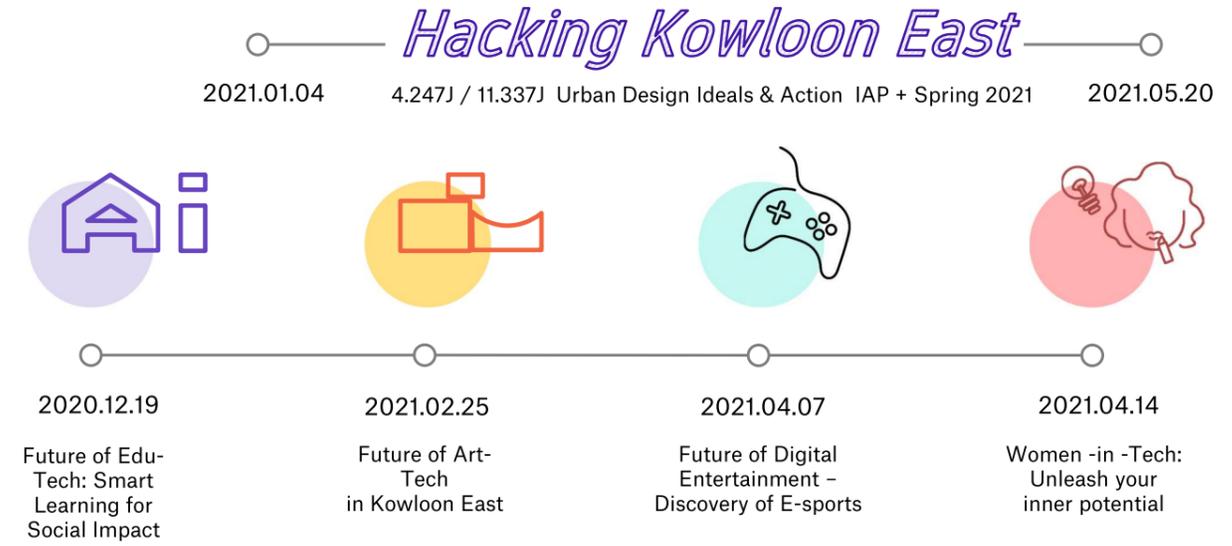
*Kowloon East Inclusive Innovation & Growth, Phase II Smart City Initiative, MIT Hong Kong Innovation Node*



Hacking Kowloon East

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## Hacking Kowloon East



MIT HK Innovation Node is committed to looking for opportunities and spaces for local development. Reflecting on the social impact of digital technology development, we focus on human-centric technology use and explore innovative approaches to promote social equality and community participation. Currently, we are actively preparing for a practical Phase 2 Pilot Programme (Workshop) of Kowloon East Inclusive Innovation & Growth Project, and working with local collaborators to realize the various possibilities of the project. Through the three pilot programs (workshops), we aim to identify and connect with local partners,

and gather opinions from our first cohorts of participants of the target communities. Our target communities include: Migrant Stay-home Women (25-54 years old), Disadvantaged Youth (15-24+ years old), and Small and Medium-sized Enterprises (SMEs) in Education Technology. In 2020-2021, we plan to implement a number of design workshops to bring together the MIT team and local partners in Hong Kong, and use professional knowledge and creativity to develop the strategies for better allocation of multiple resources in Kowloon East.

*Group discussions among art-tech startups, local artists, and domain experts, "Future of Art-Tech in Kowloon East" workshop, Feb 25, 2021*  
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Dec 19, 2020

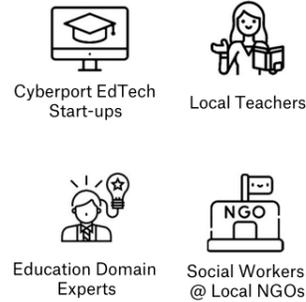


# Future of Edu-Tech: Smart Learning for Social Impact

教育科技於未來: 影響社群的智能學習

Set Kowloon East as an example for smart city to discuss education, learners, and a new learning environment.

## Who participated?

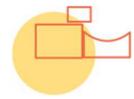


## Participants had:

- Built a mindset required for creative problem-solving
- Enhanced the understanding of stakeholders' need
- Developed disruptive innovations with a future mindset
- Generated rapid results with a team via simple ideation and prototype tools



Feb 25, 2021



# Future of Art-Tech in Kowloon East

九龍東藝術科技於未來

Unveil and discover the new possibilities that Art-Tech can bring into the performing arts industry by the mindful collaboration between traditional artisanship and modern technology.

## Who participated?



## Participants had:

- Understood why design and design thinking are the key to unlocking opportunities in human-centric innovations
- Learnt how renowned organisations in the world are applying design thinking for enjoyment and creation of art and in tech R&D
- Known a new type of leadership that emphasises the power of humility and creativity
- A hand-on experience of the co-creation process to re-imagine in experiencing art in the future with experts in the field



Apr 07, 2021



# Future of Digital Entertainment - Discovery of E-sports

數碼娛樂之明日里程 — 電競的發現

Encourage disadvantaged youths to learn different types of roles available and explore ways to land their dream role in E-sports.

## Who participated?



## Participants had:

- RV (Real Virtuality) racing car test drive
- CyberLab game zone special tour
- Career planning experience sharing and exchange with our guest speakers (Mr. San Wong & Mr. Raymond Yeung)



Apr 14, 2021



# Women -in -Tech: Unleash your inner potential

「科創女程 — 展開妳的內在潛能」工作坊

Hearten job-waiting women to discover and redefine their potential to be the biggest names in the era of self-media.

## Who participated?



## Participants had:

- Brand KOL top-secret studio visit
- Brand KOL successful experience sharing (Ms. Amanda Wu & Mr. Raymond Yeung)



# ACKNOWLEDGEMENT

## Faculty & Teaching Team

**Christopher Zegras**  
Professor of Mobility and Urban Planning  
Department Head, MIT Department of Urban Studies and Planning, MIT

**Brent D. Ryan**  
Associate Professor of Urban Design and Public Policy, Head of City Design and Development Group  
Department of Urban Studies and Planning, MIT

**Charles G. Sodini**  
Faculty Director, MIT Hong Kong Innovation Node  
LeBel Professor of Electrical Engineering & Computer Science, MIT

**Sunnie S.Y. Lau**  
Director of Smart City Research and Industry Collaborations, MIT Hong Kong Innovation Node

**Sol Andrew Stokols**  
PhD Candidate  
Department of Urban Studies and Planning, MIT

**Chi Chiu Cheng (David)**  
Teaching Assistant (Field Work & Suvey)  
MIT Hong Kong Innovation Node  
Master of Science in Urban Planning, 2nd Year, HKU

*Photos on the left are the highlights of Hacking Kowloon East IAP Workshop 2021, Jan 4-16, 2021 ©MIT HK INNOVATION NODE*



Hacking Kowloon East

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# ACKNOWLEDGEMENT

## MIT Hong Kong Innovation Node Team

**Charles G. Sodini**  
Faculty Director

**Charleston Sin**  
Executive Director

**Marina Chan**  
Director of Education

**Sunnie S.Y. Lau**  
Director of Smart City Research and  
Industry Collaboration

**Theodora Karamanlis**  
Programme Coordinator

**Angel Lai**  
Senior Manager - Industry Liaison

**Alice Lo**  
Operations Manager

**Janice Lam**  
Programme Manager

**Dining Liu**  
Project Coordinator

**Samuel Chan**  
Technology Associate

## Knowledge Contributors (Guest Speakers & Interviewees)

**Bruce Au**  
Senior Charities Project Manager, The  
Hong Kong Jockey Club

**Y.C. Chan**  
Head of Spatial Data Office (Designate),  
Development Bureau, HKSAR Government

**Grace Chau**  
Project Manager, Oysters Save Our  
Seas (Oyster SOS), Hong Kong Marine  
Ecological Association

**Catherine D'Ignazio**  
Assistant Professor of Urban Science &  
Planning; Director, Data+Feminism Lab,  
DUSP, MIT

**Rita Kan**  
Project Manager, Little Life Warrior  
Society

**Dorothy Lam**  
Co-Founder & Chief Catalyst, Dream  
Impact

**Yanki Lee**  
Design Activist, Researcher, and Co-  
founder, Enable Foundation

**Helen Leung**  
Senior Architect, Hong Kong Housing  
Authority

**Kenneth M.Y. Leung**  
Chair Professor of Environmental  
Toxicology and Chemistry, Department  
of Chemistry; Director of State Key  
Laboratory of Marine Pollution, CUHK

**Libo Li**  
CTO, KatalystDI  
ex-WeWork Senior Data Solutions  
Architect

**K.K. Ling**  
Director, Jockey Club Design Institute for  
Social Innovation

**Calvin Luk**  
Chairman, Association for Universal  
Accessibility Hong Kong

**Vivian W.Q. Lou**  
Director, Sau Po Centre on Aging

**Tanvi Maheshari**  
Associate Director, Future Cities Global  
programme (Singapore), ETH

**Andres Sevtsuk**  
Associate Professor of Urban Science and  
Planning; Director, City Form Lab, DUSP,  
MIT

**Ken So**  
Chief Executive, The Conservancy  
Association

**Devisari Tunas**  
Co-Investigator of Agropolitan Territories  
of Monsoon Asias, Future Cities Global  
programme (Singapore), ETH

**Vincent Wong**  
Senior Town Planner, Information  
Systems and Land Supply Section,  
Planning Department, HKSAR Government

*To learn more and view the full list of contributors for Hacking Kowloon East IAP workshop, please visit our website  
<https://hkinnovationnode.mit.edu/workshops/mit-academic-workshop/hacking-kowloon-east-workshop-2021/>*

