

## JOURNAL PUBLICATION

Digital common(s): the role of digital gamification in participatory design for the planning of high-density housing estates. Journal: *Frontiers in Virtual Reality*. Provides Ng, Yuechun Li, Shutong Zhu, Bingge Xu and Jeroen van Ameijde. (2023). <https://doi.org/10.3389/frvir.2022.1062336>

Transitional Domesticity: Collectivisation and Fractionalisation in P2P Digital Citizenry - Learning from Socio-Innovations of Chinese-Asian Historical Contexts. Journal: *Hybrid Domesticities*. De Gruyter academic publishing. Provides Ng. (2023).

Editor's Note: Welcome to Prospectives Issue 03. Journal: *Climate F(r)ictions*. The Bartlett Prospectives Journal. UCL.

Editor's Note: Welcome to Prospectives Issue 02: *Algorithmic Form*. The Bartlett Prospectives Journal. UCL.

## PEER-REVIEW PUBLICATION

### Co-Design & Extended Reality (XR)

Kit-of-Parts Design for Architecture Co-creation Games. In: Accelerated Design. Conference: CAADRIA 2024. Singapore. Provides Ng, Yuechun Li, Shutong Zhu, Jeroen Van Ameijde. (2024).

Structuring Gamified Participatory Public Space Design: Developing a Design Quality Evaluation System to Support Digital Co-creation Processes. In: Creativity in the Age of Digital Reproduction. xArch 2023. Lecture Notes in Civil Engineering, vol 343. Springer, Singapore. Zhu, Shutong. Ng, Provides. van Ameijde, Jeroen. (2024). [https://doi.org/10.1007/978-981-97-0621-1\\_32](https://doi.org/10.1007/978-981-97-0621-1_32)

Digital Commons: Decolonial Urbanism in Datafied Society. Conference: IFOU 2022. Ng, Provides. Fernandez, Alberto. Kalema, Nai. (2022)

Round The Table: Education without the 2d frame constraints - a WebVR experience from a glocal perspective. SIGraDi 2022. Ng, Provides & Fernandez, Alberto. (2022).

Collaborative Intelligence: The Tao of DAO. Conference: IFoU 2021. Ng, Provides. (2021). DOI: 10.24404/6155EB7A504BB200083200BA

### Blockchain & Decentralisation

21E8: Coupling Generative Adversarial Neural Networks (GANS) with Blockchain Applications in Building Information Modelling (BIM) Systems. PROJECTIONS - Proceedings of the 26th CAADRIA Conference - Volume 2, The Chinese University of Hong Kong and Online, Hong Kong, 29 March - 1 April 2021, pp. 111-120. Ng, Provides. (2021). <https://doi.org/10.52842/conf.caadria.2021.2.111>

Applying Satoshi's Vision to Brownfield Sites Revitalisation in Hong Kong. Conference: 13th International Forum of Urbanism (IFoU) Congress 2020 9-12 October 2020 in Nanjing, China. Ng, Provides. (2020).

Disrupting The Information Economy of Architecture With Satoshi's Vision - How can blockchain applications in BIM help to support a circular economy inclusive to local independent and small-scale actors?. Conference: DC I/O 2020 Conference | DesignComputation.org . London, UK. Ng, Provides. (2020). DOI:10.47330/DCIO.2020.RGSP3865.

### Digitalisation & Urbanism

Control and Communication: A System Study of Platform Economics and Digital Archives in Architectural Design. Conference: Art Machines 2: International Symposium on Machine Learning and Art 2021. Ng, Provides. (2021).

Platform Urbanism: Residency Planning Towards Hyper Personalisation. Conference: DeepCity 2020-21 International Latsis Symposium. Ng, Provides. (2021).

Preemptive Futures: Entropic and Negentropic Information in Speculative Design. xCoAx 2022. Ng, Provides. (2022). DOI 10.24840/xCoAx\_2022\_16

Collaborative Vision: Livestream, Volumetric Navigation, AI Image Processing, and Algorithmic Personalisation. Conference: xCoAx 8th Conference on Computation, Communication, Aesthetics & X. 8-10 July, Graz online. Ng, Provides. (2020).

Circular Insurance: Risk Resilience in Speculative Urbanism. Conference: RESPONSIVE CITIES: DISRUPTING THROUGH CIRCULAR DESIGN SYMPOSIUM 2019. IAAC, Barcelona, Spain.: Ng, Provides. (2019).

## Artificial Intelligence (AI) & Bio-Design

AI In+form: Intelligence and Aggregation for Solar Designs in the Built Environment Gomez, P and Braida, F (eds.), *Designing Possibilities - Proceedings of the XXV International Conference of the Ibero-American Society of Digital Graphics (SIGraDi 2021)*, Online, 8 - 12 November 2021, pp. 203–215. Provides & Fernandez, Alberto & Dória, David & Odaibat, baha. (2021).

Decentralised Solar Economy: Unattended and Smart Solar Energy Urban System (UnSSEUS). In *POST-CARBON - Proceedings of the 27th CAADRIA Conference*, Sydney, 9-15 April 2022, pp. 759-768. Ng, Provides, David Doria, and ALBERTO FERNANDEZ. (2022). <https://doi.org/10.52842/conf.caadria.2022.2.759>

An Info-Biological Theory Approach to Computer-Aided Architectural Design: UnSSEUS. In *Computer-Aided Architectural Design. Design Imperatives: The Future is Now: 19th International Conference, CAAD Futures 2021*, Los Angeles, CA, USA, July 16–18, 2021, Selected Papers, pp. 436-455. Singapore: Springer Singapore, Ng, Provides, Baha Odaibat, David Doria, and Alberto Fernandez. (2022).

An Information Theory Application to Bio-design in Architecture. Conference: *Art Machines 2*. Hong Kong. Ng, Provides & Dória, David & Odaibat, baha. (2021)

## INVITED PUBLICATION

What is a Collage of Media Architecture?. In: *Provocations on Media Architecture*. Ng, Provides & Joteva, Eli & Ya Nzi & Konevskikh, Artem. & GPT2. (2023)

The Algorithmic Form in Isa Genzken What's the hook? Social Architecture?. In: *The Bartlett Prospectives Journal*. Issue 2. Spring-Summer 2022. Ng, Provides (2022)

CurrenSee: A Ecological Attention Economy. In: *Monumental Wastelands Magazine*. Ng, Provides & Joteva, Eli & Ya Nzi & Konevskikh, Artem. (2020)

## CONFERENCE POSTER

Digital Common(s): The Role of Gamification and Immersive Technology in Co-Design of Public Spaces. CAADRIA 2023. Provides Ng, Yuechun Li, Shutong Zhu, Bingge Xu & Jeroen van Ameijde. (2023).

Co-Learning Space: Collective Design of Learning Spaces Using Immersive Digital Twins and Virtual Reality Technologies. Virtual Teaching and Learning Innovation Expo in the Metaverse. CUHK. Provides Ng, Jimmy HO, Yuechun LI, Paul LAM. (2023).

AI in+form: AI application in Participatory Solar Design. Design Computing and Cognition'22. Ng, Provides & Fernandez, Alberto & Dória, David. (2022).

Round-The-Table: A Sustainable Academia Via Phygital Exchanges. Conference: CAADRIA 2022. Project Category. Provides Ng & Alberto Fernandez (2022)

Current: A Platform for Urban Archive. Conference: DC I/O 2020 Conference | DesignComputation.org . London, UK. Ng, Provides & Joteva, Eli & Nzi, Ya. (2020). DOI:10.47330/DCIO.2020.VWEG6251.

Preemptive Futures: The Application of Preemption in a Computational Data Market for Architecture. Conference: SiGraDi2020 PHD Workshop Virtual. Ng, Provides. (2020).

## SYMPOSIUM ABSTRACT

Urban Cultural Inheritance: Generative Adversarial Networks (GANs) Assisted Street Façade Design Based on Indigenous Hakka Settlements in Hong Kong. Conference: International Conference on Advances in Design, Materials and Manufacturing Technologies 2022 (ICADMMT 2022). DONG, Jia-Hua & NG, Provides. (2022)

Universal Basic Service: Land Collectivisation, De-collectivisation and Scalability. Conference: Mediating scale 2022. Ng, Provides. (2022)

Archives And Platforms: A Sustainable Economy Of Information. Conference: AA x SAHGB x RIBA Annual Symposium 2020 'Arch/teatures Arch/ves'. Ng, Provides. (2020).

The Architecture of De-carbonisation: Spaces that Teach. AA School of Architecture Open Call. Ng, Provides. (2020). Carbon Derivatives: Decentralising Urban Vegetation. Conference: Future Architecture. Ng, Provides. (2019).