

# Ong Guo Xiang

Email: [ong.guoxiang@gmail.com](mailto:ong.guoxiang@gmail.com)

Portfolio: <https://gxite.github.io>

LinkedIn: [www.linkedin.com/in/ongguoxiang](https://www.linkedin.com/in/ongguoxiang)

Github: <https://github.com/gxite>

I am a self-motivated individual with work experience in Architecture, GIS, Urban Research, Spatial Analysis and building web applications. My experience allows me to serve as a bridge between multiple disciplines. I am currently seeking to gain more exposure to software engineering work.

## WORK EXPERIENCE

### Research Assistant

National University of Singapore Jul 2019 – Dec 2020 (1yr 6mo)

*I worked on the coding, GIS, spatial analysis and the publication aspects of the research, as well as the occasional design tasks on the sides.*

Project: Measuring Physical Profile and Use of Park Connector Network with Deep Learning and Multi-Source Multi-Modal Data Analytics

PI: Dr Zhang Ye, Assistant Professor

- Worked with object and activity detection models using Python within Ubuntu to extract data from video footage. I wrote the glue code to integrate open source ML models and the code to process the detections into geotagged datasets.  
Link: [github.com/gxite/pcn-acam](https://github.com/gxite/pcn-acam)
- Conducts spatial analysis on research data. I picked up the basics of spatial econometrics and applied it on the research data.
- Contributed as the main author for a conference paper in IFOU 2020. I am currently working towards a journal submission.  
Link: [gxite.github.io/portfolio/observations\\_of\\_urban\\_activities\\_with\\_computer\\_vision.pdf](https://gxite.github.io/portfolio/observations_of_urban_activities_with_computer_vision.pdf)
- Developed a web based application to visualize spatial data. (WIP)  
Link: <https://pcn-web.web.app/>  
Repo Link: [github.com/gxite/pcn-mapvis](https://github.com/gxite/pcn-mapvis)
- Designed an exhibition entry in the Singapore Pavilion for the Venice Biennale 2020.  
Link: [gxite.github.io/portfolio/venice\\_table.pdf](https://gxite.github.io/portfolio/venice_table.pdf)

### Architectural Associate

DCA Architects Pte Ltd Jun 2017 – Jun 2019 (2yrs 1mo)

*I have generated design renders, designed facilities for condominiums, managed construction contracts from start to TOP and worked on computational design projects.*

- Worked as a Design Architect in collaboration with local consultant teams in Ho Chi Minh City, where I am responsible for generating design renders and visuals for all client presentations.
- Worked as a Project Architect for 2 Addition and Alteration works. During which, I managed regulatory clearance, reviewed shop-drawings, provided design directions and visuals for presentations.  
Projects:
  - CAG Terminal 3 Basement 2 A&A (Garden, amphitheatre, retail Shops, green wall)
  - CAG Taxi Holding Deck for Terminal 1 & Terminal 3 A&A
- Designed a simple parametric wall and column cladding within Rhinoceros 3D + Grasshopper.  
Link: [gxite.github.io/perforated\\_panels.html](https://gxite.github.io/perforated_panels.html)
- Produced a proof of concept that allows users to use spreadsheet based unit type distribution table to interact with Revit models via Dynamo.  
Link: [gxite.github.io/excel\\_to\\_revit.html](https://gxite.github.io/excel_to_revit.html)

## EDUCATION

### National University of Singapore

Master of Architecture (2016-2017)

Bachelor of Arts (Hons. Distinction), Architecture (2012-2016)

## SKILLS

### Framework/Languages

Current Stack

Angular (Typescript, CSS/SCSS, HTML)

Mapbox JS, Deck.gl

Firebase Real-time database

Python

### GIS & Spatial Analysis

ArcGIS

GeoDa

SPSS

### CAD & Modelling

Rhinoceros 3D

Grasshopper

AutoCAD

Sketchup

Revit

Dynamo

### Graphics & Rendering

Photoshop

Illustrator

InDesign

Lumion

Vray

## LANGUAGES

English (Native)

Mandarin (Native)