

GUOXIANG ONG

Singapore · 91777675

ong.guoxiang@gmail.com · www.linkedin.com/in/ongguoxiang

Portfolio: gxite.github.io · Github: github.com/gxite

I am a professional with work experience in architectural practice and urban research with GIS. I am proficient with CAD design tools, GIS applications and is comfortable with using Python for data processing. I have experience with using Angular, Typescript for developing front end web applications. I believe that my experiences are suitable for bridging domains in interdisciplinary teams and I am happy to learn any skills necessary to help the team achieve its objectives.

EXPERIENCE

JULY 2019 – DECEMBER 2020

RESEARCH ASSISTANT

NATIONAL UNIVERSITY OF SINGAPORE

I worked on the coding, GIS, spatial analytics 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

- Developed a web application with Angular + Mapbox + Deckgl to visualize spatial data.
(<https://pcn-web.web.app/>)
(github.com/gxite/pcn-mapvis)
- I wrote the glue code in Python to integrate open source action detection models and to process the detections into geotagged datasets.
(github.com/gxite/pcn-acam)
- I performed analytics on the extracted spatial data with ArcGIS and Geoda, where I experimented with spatial lag models to mitigate the effects of spatial dependence within the datasets.
- I contributed as the main author for a conference paper in IFOU 2020 and I am currently working towards a journal submission.
(gxite.github.io/portfolio/observations_of_urban_activities_with_computer_vision.pdf)

JUNE 2017 TO JUNE 2019

ARCHITECTURAL ASSOCIATE

DCA ARCHITECTS PTE LTD

I generated design renders, designed facilities for condominiums, managed construction contracts and worked on computational design projects.

- Worked as a Design Architect in collaboration with local consultant teams in Ho Chi Minh City. I generated design renders and visuals for all client presentations.
- Worked as a Project Architect for 2 Addition and Alteration works.
I managed regulatory clearance, reviewed shop-drawings, provided design directions and visuals for presentations.
- CAG Terminal 3 Basement 2 A&A (Garden, amphitheater, 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
- 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

EDUCATION

JULY 2017

MASTER OF ARCHITECTURE

NATIONAL UNIVERSITY OF SINGAPORE

GPA 4.0/5.0

- Master Thesis (gxite.github.io/railcorridor.html)

JUNE 2016

BACHELOR OF ARTS (HONS. DISTINCTION)

NATIONAL UNIVERSITY OF SINGAPORE

GPA 4.0/5.0

- Design Coursework on Air Rights Structure (gxite.github.io/skybridge.html)
- Computational Design Coursework (gxite.github.io/portfolio/ivp_report.pdf)
- Tracked lip movements as a game controller (gxite.github.io/catch.html)

SKILLS

Framework/Languages

- Angular
- Typescript
- CSS
- HTML
- Mapbox
- Deckgl
- Python

CAD & Modelling

- Rhino 3D
- Grasshopper
- AutoCAD
- Sketchup
- Revit
- Dynamo

GIS & Spatial Analytics

- ArcGIS
- GeoDa
- SPSS

Graphics & Rendering

- Photoshop
- Illustrator
- InDesign
- Lumion
- Vray

LANGUAGES

English

Native Proficiency

Mandarin

Native Proficiency