

# Jiayuan Chen

Page: jiayuanchen.com | Github: [github.com/geraintcyj](https://github.com/geraintcyj) | Mail: [geraintcyj@gmail.com](mailto:geraintcyj@gmail.com) | Tel: +86-15221839633

## Education

### Tongji University, Shanghai, China

Sep 2017 - Jun 2021

- BE in Civil Engineering
- Overall GPA: 4.21/5 or 87.1/100

### Technion Summer School, Haifa, Israel

Jul 2019 - Aug 2019

- Course taken: Machine Learning (graduate level).
- Scored 89 (A) and received corresponding credits.

## Awards& Honors

China Harbor Engineering Company Scholarship (2nd tier)

Sep 2020

Scholarship of Distinction (3rd tier)

Sep 2019

Third Prize of China Mechanics Competition in Honor of Zhou Peiyuan (Top 5%)

Apr 2019

China Construction, Eighth Engineering Bureau Scholarship

Sep 2018

Second Prize of Tongji International Construction Festival (Top 4 out of 62)

Jun 2017

Freshman Scholarship

Sep 2016

## Professional Experience

### Shanghai Landleaf Architectural Technology Co., Ltd, Shanghai

Jan 2021 - Jul 2021

Frontend Development Intern

- Our group is responsible for the development of a city-planning web project.
- My responsibilities include React and Redux components development as well as API design.

### Shanghai Jinlu Construction (Group) Co., Ltd, Shanghai

Jul 2020 - Aug 2020

Construction Management Intern

- Responsibilities included examination of construction drawings, onsite survey and onsite management.

## Academic Experience

### Structural Damage Detection Based on Digital Twin and Machine Learning

Feb 2021 - Jul 2021

- This is my undergraduate final project. The objective was to establish a composite approach – both constitutive and data-driven, to detect structural damages of the Hall 10, Tokyo Institute of Technology

### Anomalous Pattern Detection of a Real Bridge

Jun 2020 - Aug 2020

- Out selected problem of the IPC-SHM competition.
- Responsible for data cleansing, algorithms, code implementation and an English presentation.
- Our original algorithms could tell 7 different anomalous patterns with a weighted accuracy of more than 95%.

### Hotel Management System Development

May 2020 - Jul 2020

- A hotel management system developed upon SQL. Server, ADO.Net and C#.
- Mainly responsible for the backend development - including database design, implementation and API design.

### Onsite Helmet Detection

Apr 2019 - Mar 2020

- The project was developed upon Mask-RCNN network.
- Responsible for dataset constructing, network training and paper writing.
- The final algorithm could detect several helmeted (and non-helmeted) persons in a single image. The mAP was above 0.75.

### Research Assistant

Sep 2019 - Nov 2019

- Responsible for stress-strain analysis, strain gauge arrangement, crack recording and photographing.
- The research focused on the fatigue performance research of steel dampers under earthquake influence.

## Extracurricular Activity

### Student Union of Tongji University, Shanghai

Sep 2016 - Mar 2019

Leader of the Department of Media and Information

- Led a department with more than 15 members.
- The mission was to run the official Wechat account Tongji Student Union (ID: tjsu1919), and to publish daily articles. It's the most prominent media in Tongji University. Daily views exceed 2000.
- Also responsible for the publicity of large-scale events, e.g., Anniversary celebrations of Tongji University.

## Skills

**Programming Languages:** Java = Python = JavaScript > C/C++ > C#.

**Software:** AutoCAD, 3Ds Max, PKPM, ANSYS, Matlab, Photoshop, Premiere Pro.