

# Jiayuan Chen

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## Education

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- Georgia Institute of Technology**, Atlanta, US Aug 2021 – Jun 2023 (Expected)
- In pursuit of Master's degree in Computational Science & Engineering
- Tongji University**, Shanghai, China Jun 2021
- B.E. in Civil Engineering
  - GPA 4.21/5.0 = 88.1/100
  - First year of study in Urban Planning
- Israel Institute of Technology**, Haifa, Israel Jun 2019 – Aug 2019
- Machine Learning full course program
  - Grade 4.0/4.0

## Professional Experience

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- Shanghai Landleaf Architectural Technology Co., Ltd**, Shanghai, China Jan 2021 – Jul 2021
- Frontend Development Intern*
- Responsible for React component design and implementation.
  - Gained enormous experience in JS & React development, styling techniques, coding principles, etc.
  - Worked with the frontend team that built the whole website (<https://ai-arch.cn>) from scratch.
  - Participated in the project deployment and server maintenance & debugging.

## Projects

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- Structural Damage Detection Based on Digital Twin and Machine Learning** Mar 2021 – Jun 2021
- Established a composite approach – both constitutive and data-driven, to detect structural damages of an existing structure under stochastic earthquake input.
  - Involved advanced programming using Matlab and Simulink.
  - Wrote a 53-page final paper. Revision for publishing in progress.
- Anomalous Pattern Detection of a Real Bridge (The 1<sup>st</sup> IPC-SHM Competition)** Jul 2020 – Aug 2020
- Designed team's algorithms and ML network, implemented these and made a final English presentation.
  - Documented findings in a paper.
  - Achieved a weighted accuracy of more than 95%.
- Hotel Management System Development** May 2020 – Jun 2020
- Developed upon SQL. Server, ADO.Net and C#.
  - Responsible for the backend development - including database design, implementation and API design.
- Onsite Helmet Detection System** Apr 2019 – Mar 2020
- Responsible for dataset constructing, network training and paper writing.
  - Succeeded in detecting helmeted and non-helmeted persons in images. Achieved an mAP exceeding 0.75.

## Leadership

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- Student Union of Tongji University, Shanghai** Sep 2016 – Mar 2019
- Department of Media and Information, Leader*
- Led a department with more than 15 members.
  - Responsible for running our official Wechat account Tongji Student Union (ID: *tjsu1919*), and to publish daily articles.
  - Once made *tjsu1919* the most prominent media in Tongji University. Daily views exceeded 4000.
  - Participated in the work of larger scale events.

## Skills

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**Programming Languages:** Java (Advanced), Python (Advanced), JavaScript (Advanced), Matlab (Advanced), C++ (Intermediate), C# (Intermediate).

**Engineering Software:** AutoCAD, 3Ds Max, Markdown, Matlab, Simulink, PKPM, TianZheng, ANSYS, SAP2000.