Jiayuan Chen

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Education

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

Shanghai Hezhu Digital Technology Co., Ltd, Shanghai, China   *Jan 2021 – Jul 2021*
Frontend Development Intern
- Designed and implemented more than 50 React components including several important generic ones.
- Gained industry experience in JS, React & Django development, styling techniques, coding principles, etc.
- Worked as a member of the frontend team. Built the whole website (https://ai-arch.cn) from scratch.
- Participated in server maintenance & debugging and project deployment.

Projects

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.
- Implemented advanced Matlab & Simulink programming.
- Composed a 53-page final paper. Revision for publishing in progress.

Anomalous Pattern Detection of a Real Bridge (The 1st IPC-SHM Competition)   *Jul 2020 – Aug 2020*
- Designed team's algorithms and ML network, implemented these and made a final presentation.
- Documented findings in a paper.
- Achieved a weighted accuracy of more than 95%.

Hotel Management System Development   *May 2020 – Jun 2020*
- Developed with SQL. Server, ADO.Net and C#.
- Designed and implemented the whole database and more than 10 APIs.

Onsite Helmet Detection System   *Apr 2019 – Mar 2020*
- Responsible for image acquisition, dataset constructing, and network training.
- Succeeded in detecting helmeted and non-helmeted persons in images. Achieved a mAP exceeding 0.75.

Leadership

Student Union of Tongji University, Shanghai   *Sep 2016 – Mar 2019*
Department of Media and Information, President
- Led a department with more than 15 members.
- Administrated one of Tongji University's official Wechat account - Tongji Student Union (ID: *tjsu1919*), and kept publishing daily articles.
- Restored *tjsu1919* to its former prominence. Daily views exceeded 4000.
- Participated in the operation of other university events.

Skills

Programming Languages: Java, Python, JavaScript, Matlab, C++, C#.

Engineering Software: JetBrains IDEs, VS Code, Git, Markdown, Matlab, AutoCAD, PKPM, ANSYS, SAP2000.

Design Software: 3Ds Max, Sketch Up, Rhino, Photoshop, Premiere Pro, Adobe Xd.