CURRICULUM VITAE

PERSONAL INFORMATION

Name Wang Cheng
Nationality Chinese
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Phone (+86)18696143267

EDUCATION

Language **IELTS(academic)**
Total:7.5

2018.09 - present **M.Eng. Student**
(academic degree)
Major: Civil Engineering
Southeast University
Jiangsu, China

2014.09 - 2018.06 **B.Eng.**
Major: Civil Engineering
University of Science and Technology Beijing
Beijing, China

PUBLICATION

[1] Wang Y H, Lv J, Wu J, **Cheng Wang**. ANN based on forgetting factor for online model updating in substructure pseudo-dynamic hybrid simulation[J]. *SMART STRUCTURES AND SYSTEMS*. 2020, 26(1): 63-75.

[2] Wang Yanhua,Lv Jing,Wu Jing,**Wang Cheng**. Prediction method of restoring force based on online Adaboost regression tree algorithm in hybrid test[J].*Journal of Southeast University(English Edition)*,2020,36(02):181-187.

[3] Wang Yanhua, **Wang Cheng**, Feng Yan, Dai Bowen, Wu Gang, "Application and Analyzation of the Vision-Based Structure Model Displacement Measuring Method in Cassette Structure Shaking Table Experiment", *Advances in Civil Engineering*, vol. 2020, https://doi.org/10.1155/2020/8869935

[4] Wang Yanhua, Wu Gang, **Wang Cheng**,基于卷积神经网络的抗震混合试验模型更新方法 (Convolutional Neural Network Based Model Updating Method of Hybrid Test)[P]. CN110631792A,2019-12-31

[5] Wang Yanhua, **Wang Cheng**, "Analysis of Vision-based Non-contact Displacement Measurement in Shaking Table Test", *Smart Structures and Systems,* (under reveiw)

RESEARCH PROJECT

2018.12-2019.11
Youth Program of National Natural Science Foundation of China, 51708110, Neural Network Based Model Updating Substructure Pseudo-dynamic Testing Method

2019.11-2021.6
National Key Scientific Instrument and Equipment Development Project, Development of High-precision Three-dimensional Dynamic Deformation Measurement and Analysis System of Large Strcuture

PROFESSIONAL SKILLS

•Proficiency with tools including CAD, Matlab, Abaqus, OpenSees and Photoshop, Origin, Adobe Illustrator.

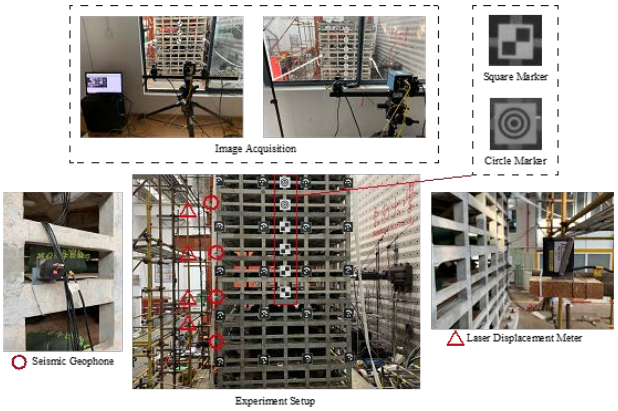
•Python programing, computer vision

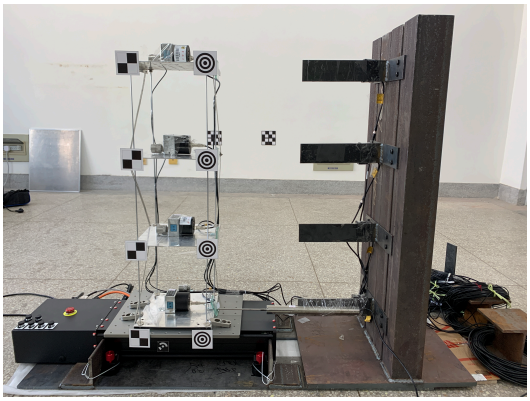
SELF SUMMARY

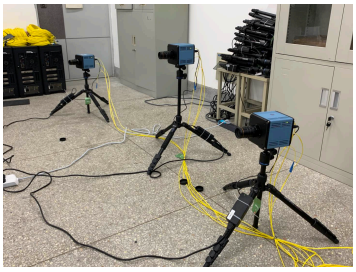
Research Interest：

1.Computer vision based damage detection, displacement and strain measurement,etc.
2.Digital Image Correlation(DIC), Optical Measurement, computer vision, Deep Learning interacted with Civil Engineering；

I have taken part in two research study, the first one is about hybrid test and the second is about non-contact measurement in shaking table test. The main job of the first one using Matlab, Openfresco and OpenSees to interact element analysis with real physical loading experiment, and using ANN based on forgetting factor for online model updating in element analysis. I helped with the software connection with MTS, the loading experiment, a speech on a academic meeting, the article writing, etc..
The main job of my second research is that I developed a computer vision based displacement measurement program and have it tested in shaking table test to analyze its accuracy. The experiment accomplished recently is shown in the picture. Also, there is another paper being written about some recent work.







I am an optimistic person and persist in doing things, such as basketball for 14 years and fitness for three years without stop. In addition, executive force is also one of my character and I think it is important to a researcher. The reason I choose to study for a Ph. D. is that I am still thirsty for knowledge and curious to what I am interested in. At the same time, I hope that I can contribute a little to the field and industry. Stay hungry, stay foolish!
Thanks a lot!