

# Taokui LI | Civil Engineering Postgraduate

Location: Kai Feng, CHINA

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## Core Skills

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|---------------------|-------------------|------------------------|
| • Civil Engineering | • SHM             | • Structural Vibration |
| • ML/DL             | • Computer Vision | • Research Analysis    |

## Education

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### MSc

**Civil Engineering (Distinction, GPA: 3.59/4.00)**

City University of HONG KONG (Sep. 2022 – Aug. 2022)

Thesis: “Structural Damage Detection based on ANNs”.

Modules: Modern Structural Engineering; Methods of Analysis in Civil Engineering and Engineering Mechanics; Transportation and Land Planning; Virtual Design and Construction; Geomechanics.

### BEng

**Civil Engineering (GPA: 3.42/4.00)**

Henan University (Sep. 2016 – June 2020)

Thesis: “Design of a simply supported beam Bridge”.

Modules: Structural Mechanics; Theoretical Mechanics; Material Mechanics; Soil Mechanics; Elastic Mechanics; Hydro-Mechanics; Bridge Engineering.

## Research Experience

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**July 2021 – Nov. 2021**

**Engineering decision-making and risk analysis**

**University of Illinois Urbana-Champaign(online)**

### Outline

Direct a team of 2 fellow students to analyze and predict the occurrence of hotel fire in Foshan by establishing a Bayesian network model.

### Key Responsibilities

- Employ analyses, inclusive of data collection of six factors causing fire, and classifying them into three categories, including men-made factors, natural factors and objective factors, to establish a three-layer Bayesian network model.
- Produce comprehensive reports on analysis of hotel fire and reduction in fire losses.

## Additional Information

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### IT Skills:

MATLAB, ANSYS, Python including Pytorch and TF.

### Others:

Familiar with SVM, K-MEAN, MCMC, RNN, CNN and other Machine Learning/ Deep Learning algorithms. Good mathematical foundation in linear algebra and probabilities