



Computer Vision-based Traffic Monitoring System

TEAM 12

Members

Yuyang LIU	16522049
Zilin SONG	16522063
Jingyu LUO	16521724
Jiawei TIAN	16515499
Shiye XU	16521987

Supervisor

Qian ZHANG



OVERVIEW

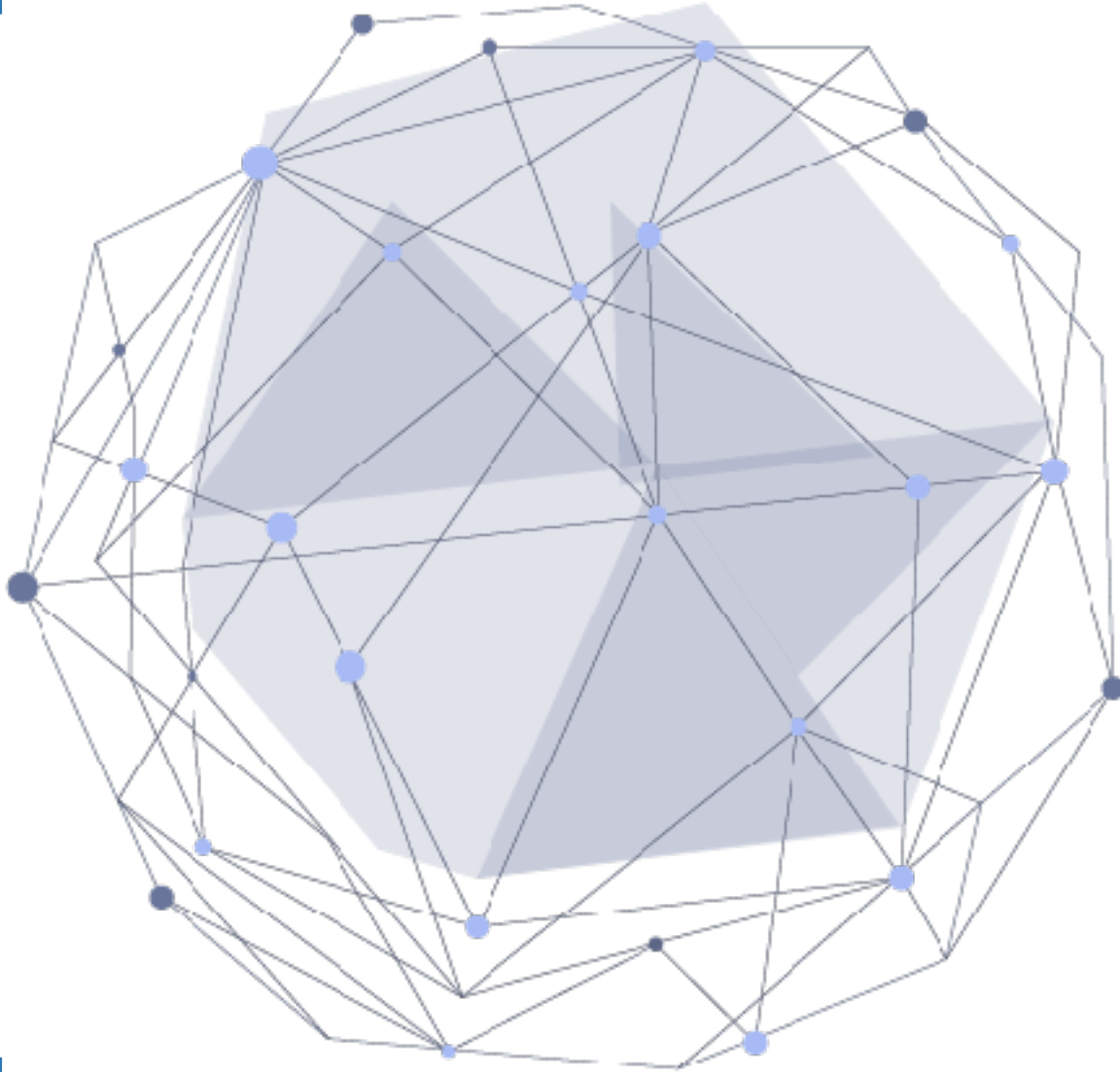


Part 1 Introduction of the project

- **Background and problems**
- **Solutions**
- **Functions**
- **Overall framework**

Part 2 The software and display

Part 3 Q&A



[1]

Introduction of the project



Drawbacks of the current system

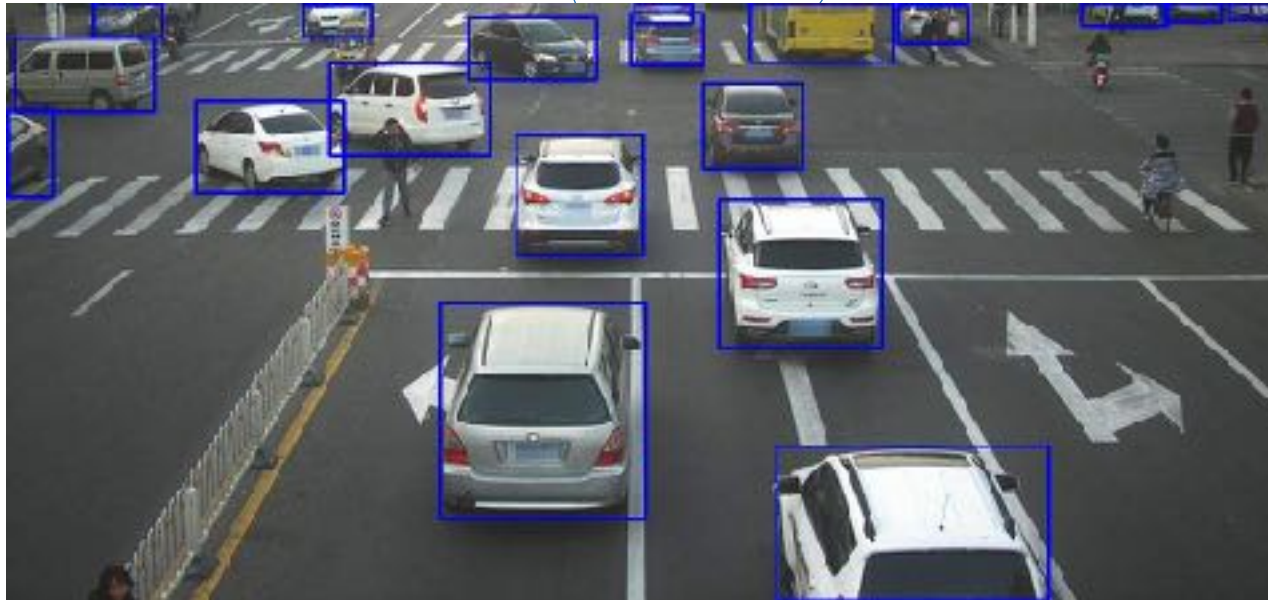
- Deployment of loads of devices
- High costs, low mobility
- Painful workforce

New techniques

- Unmanned Aerial Vehicle
- Computer Vision

Benefits

- Road condition
- Classify the vehicles



Detection

Surround a vehicle with a "box"

Counting

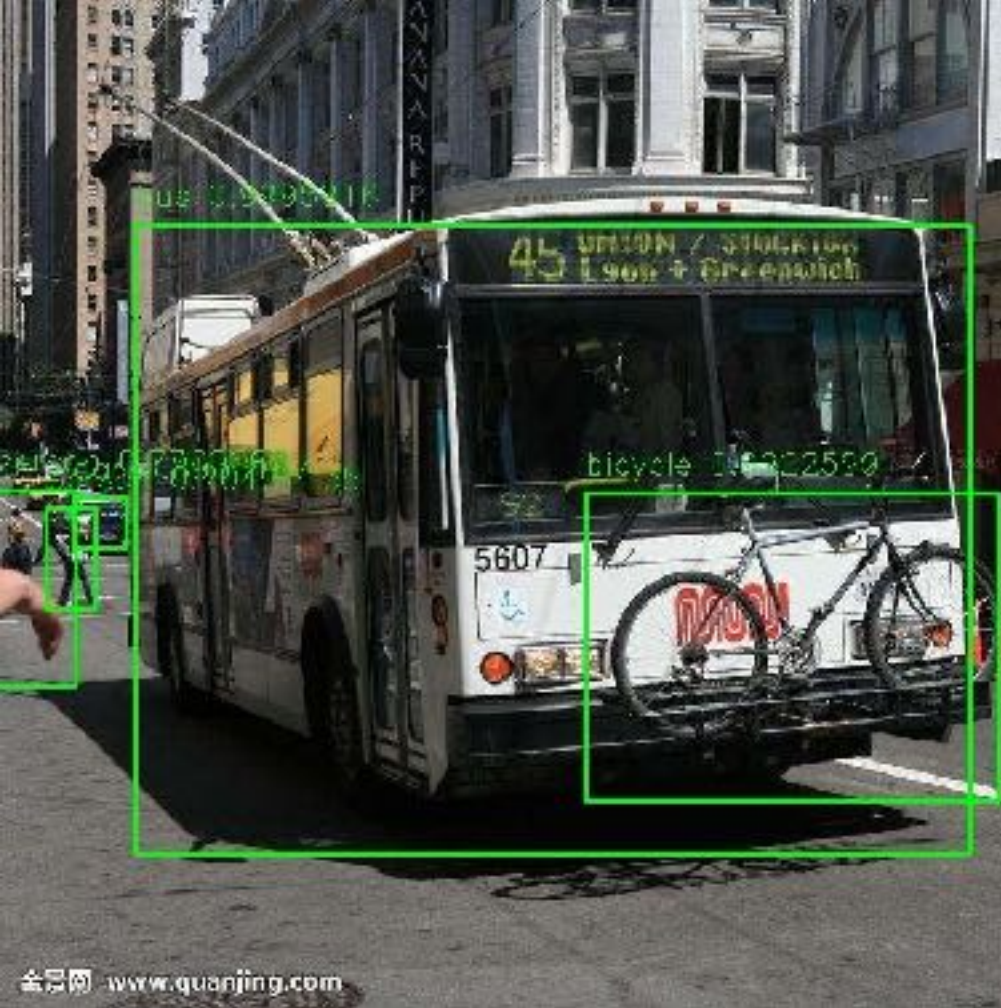
Calculate the number of vehicles

Tracking

Recognize a vehicle through several constant frames



Tracking



Detection



Framework



- Easy access
- Upload video

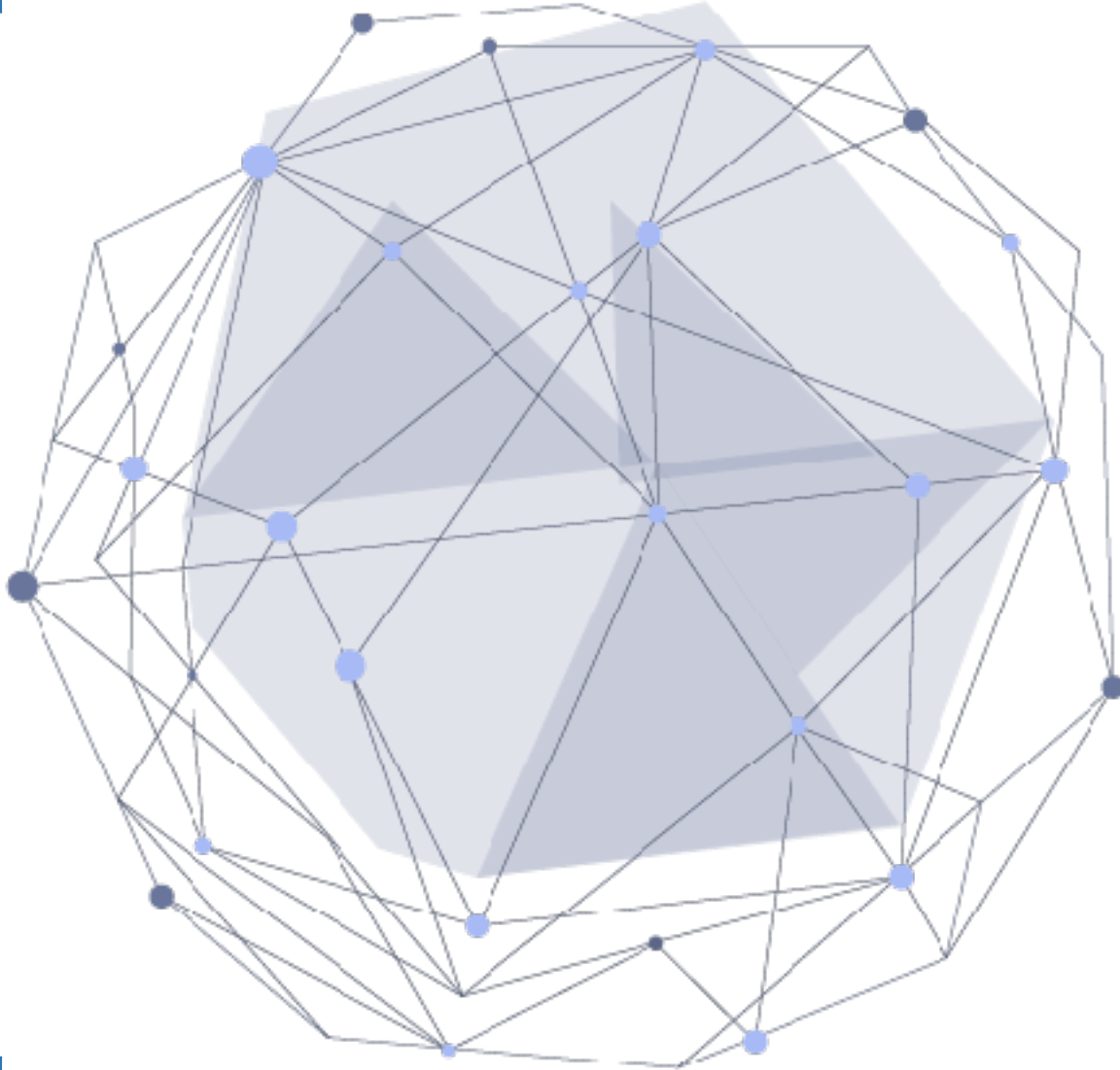
Front-end

Web Application

Back-end

- Detection
- Tracking
- Powerful computing ability

Cloud Server



[2]

The Software and display

TRAFFIC MONITORING

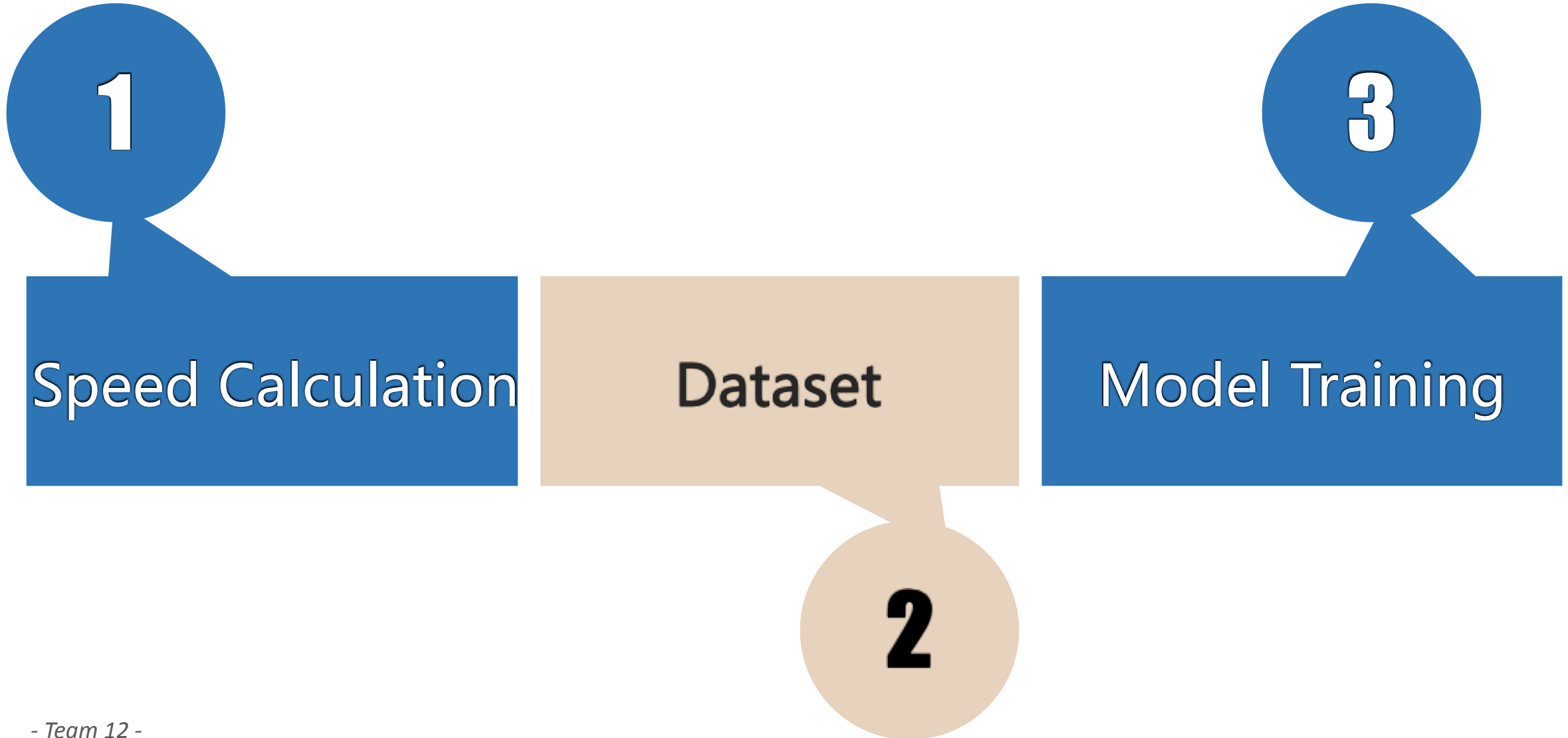
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Future Plan



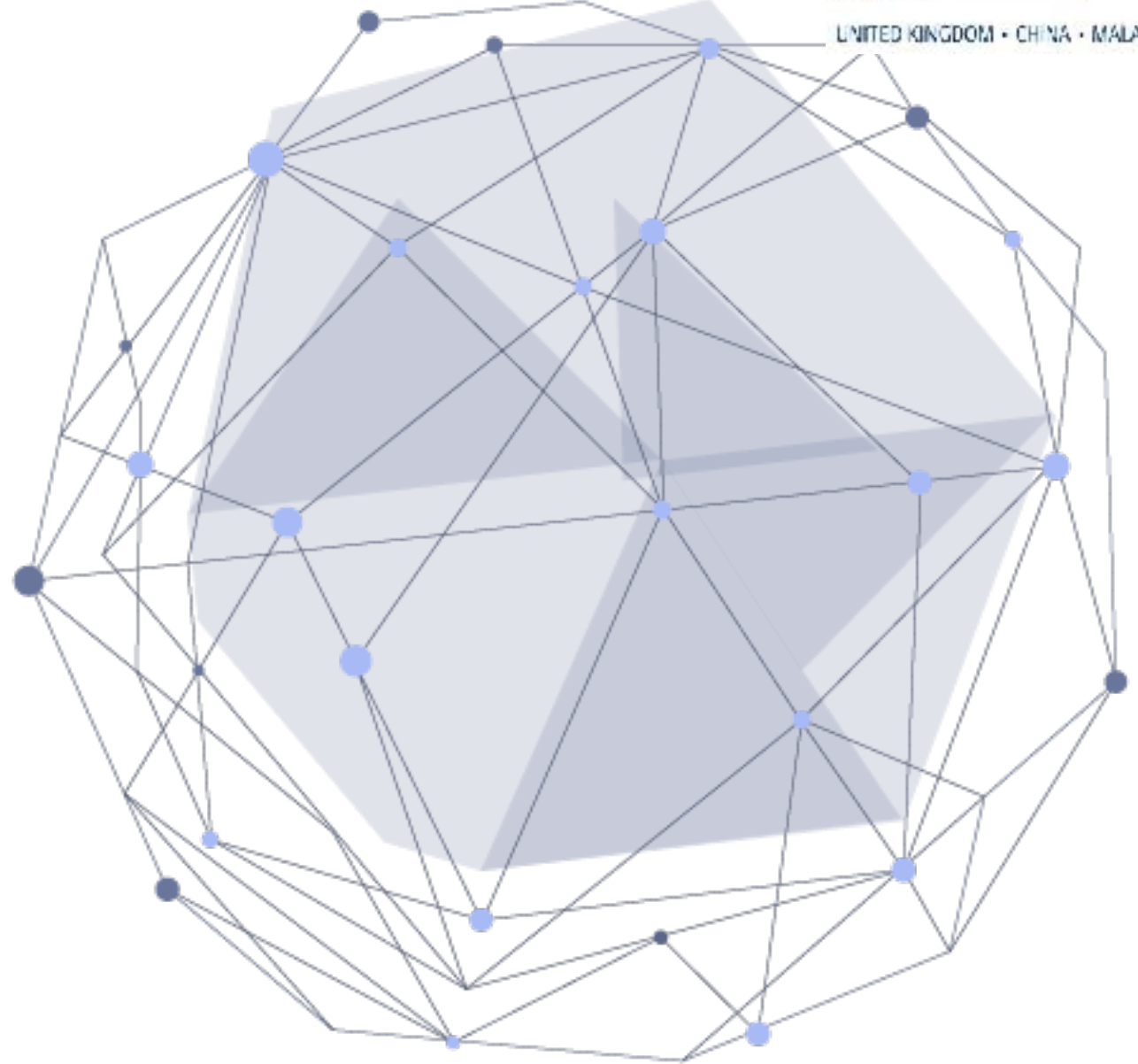
The University of
Nottingham

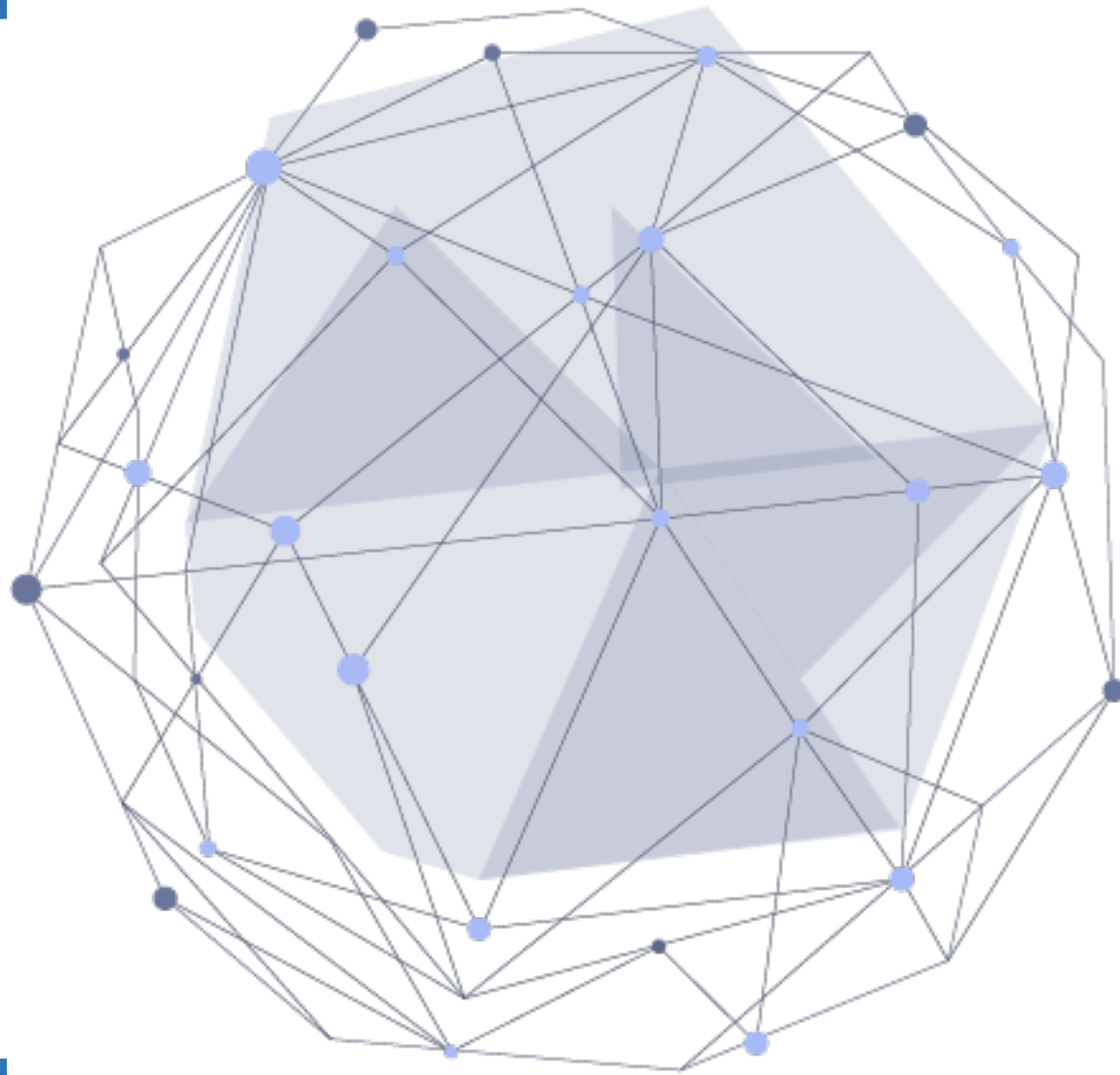
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THANK YOU





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Q&A