

# He Shuncheng

## Education

2012– **Automation, Tsinghua University, Beijing, Grade 4.**

- GPA:92/100, rank 3rd/140
- Proficient in these courses:
  - Mathematics: Linear Algebra, Calculus, Discrete Mathematics, Probability, Operation Research
  - Engineering: Engineering Graphics, Electronic Technology Practice
  - Electronics: Electronic Circuits, Digital Electronics, Power Electronics
  - Programming: C, C++, Data Structure, Artificial Intelligence
  - Control theory: Classic Control Theory, Modern Control Theory, Process Control

## Academic Skills

### Programming languages

- Proficient in C, C++
- Knowledge of Matlab, L<sup>A</sup>T<sub>E</sub>X, Python, Java, Swift, MySQL, Haskell and Assembly Language

### Programming environment and development kit

- IDE: Visual Studio, Qt Creator, Xcode
- Libraries: OpenCV, libsvm, Caffe, DirectX3D, NLTK

## Academic Interests

- Deep Learning
- Computer Vision
- Machine Learning

## Academic Experience

2015– **Junior Research Assistant in The Chinese University of Hong Kong.**

- Exploration of Yahoo's 100M Image dataset
- Classifier design based on deep learning
- Concept learning on image dataset

2014– **Tsinghua Spark Program.**

2014–2015 **Laboratory Program.**

- Research of video segmentation
- Extracting features from video frames
- Learning object contour

2013–2014 **Student Research Training Program.**

- Distributed and large-scale IVICS (Intelligence Vehicle Infrastructure Cooperative Systems) 3D Simulation System
- Study in car following algorithm and signal timing
- Supported by the National High-Tech Research and Development (863) Program of China (No.2012AA112305)

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**Awards and Scholarship**

- China National Scholarship, Ministry of Education of PRC, 2014
- The First Prize of the *Challenge Cup*, Tsinghua University, 2014  
Project: Distributed and Large-scale IVICS(Intelligent Vehicle Infrastructure Cooperative Systems) 3D Simulation System  
The first author of the project
- The Third Prize of the *Challenge Cup*, Tsinghua University, 2014  
Project: Intelligent Car Platform Based on Infrared Radiation Detection  
Co-author of the project
- Scientific and Technological Innovation Scholarship, Tsinghua University, 2014
- Tsinghua – DEK SMT(Surface Mounting Technology) Scholarship, Tsinghua University, 2014
- The Third Prize of the 8th Transportation Techology Contest, Department of Civil Engineering, 2014
- Tsinghua Friends – Scholarship of DONGFANG ELECTRIC, Tsinghua University, 2013
- The Third Prize of the 10th Novice C Language Programming Contest, Department of Automation, 2013
- The Second Prize of Outstanding Freshmen, Tsinghua University, 2012

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**Social Experiences**

2015– **Association of Science and Technology of Automation, Tsinghua University.**

- President

2014–2015 **Association of Science and Technology of Automation, Tsinghua University.**

- Vice President