

# Shuai Xu

No.127, West Youyi Road – Xian, Shaanxi 710072 – P.R.China

☎ +86 15991753340 • ✉ xushuainwpu@mail.nwpu.edu.cn

🌐 <http://www.sxxsxx.cn>

## Education

### Northwestern Polytechnical University (NWPU)

Undergraduate student in Detection, Guide and Control Technology

Xian, Shaanxi

Sep. 2014 – Present

## Experience

### Intelligent Information Processing Lab

NWPU

Research assistant Tutors: Prof. Wen Jiang & Prof. Yong Deng

Apr. 2016 – Present

**Research fields:** The Physarum model; Traffic assignment problem; Information fusion

Assist Prof. Yong Deng in reviewing the manuscripts of Applied Soft Computing and Science China Information Sciences

### Dance Robot Innovation Team

NWPU

Member of Electronic group, Leader of the basketball robot group

Sep. 2015 – Present

Responsible for the PCB designing, the underlying driver program and the debugging of the basketball robot and the dance robot. As a leader of the basketball robot group to organise the program, including procurement and account management

## Preprints and Publications

- 1): **Shuai Xu**, Wen Jiang\*, A Physarum-inspired model for the probit-based stochastic user equilibrium problem. International Journal of Unconventional Computing (Accepted)
- 2): **Shuai Xu**, Wen Jiang\*, Yehang Shou, A modified Physarum-inspired model for the user equilibrium traffic assignment problem. Applied Mathematical Modelling (Major revision)
- 3): **Shuai Xu**, Wen Jiang\*, Yongchuan Tang, An efficient Physarum-inspired model for the user equilibrium traffic assignment problem with elastic demand. Physica D (Under review)
- 4): Yongchuan Tang\*, Deyun Zhou, **Shuai Xu**, Zichang He, A weighted belief entropy-based uncertainty measure for multi-sensor data fusion, Sensors (Online published)
- 5): Yongchuan Tang\*, Deyun Zhou, **Shuai Xu**, Zichang He, An improved Physarum solver for fuzzy supply chain network, Discrete Dynamics in Nature and Society (Under review)
- 6): Yongchuan Tang\*, Deyun Zhou, Zichang He, **Shuai Xu**, An improved belief entropy-based uncertainty management approach for sensor data fusion, International Journal of Distributed Sensor Networks (Accepted)
- 7): **Shuai Xu**, Zichang He, Tao Wen, Jiang Wen\*, A Physarum-inspired model for the path planning of Uninhabited Combat Air Vehicle, the 8th China Information fusion conference (In Chinese, Accepted)

## National Innovation Training Program

- 1): Research on Intelligent Technology of Bicycle Safety (**Leader of the program**) May. 2016 – Present
- 2): Medical image segmentation based on evidence theory and its accomplishment in FPGA May. 2016 – Present

## Honor & Award

- |  |           |
|--|-----------|
| Honorable Mention in Mathematical Contest In Modeling/ Interdisciplinary Contest in Modeling | Jan. 2017 |
| China robot competition 2016, Changsha, Hunan  | Oct. 2016 |
| Champion in Dancing Robot Pursuit Heterogeneous  |           |
| Run-up in Basketball Autonomous Robot  |           |
| The Saibao special scholarship   | Dec. 2016 |
| First Prize in the 17th Northwestern Polytechnical University Mathematical Modelling Contest | Jun. 2016 |
| National Encouragement Scholarship   | Dec. 2015 |
| Second Prize in smart car competition of NWPU  | Dec. 2015 |

Second Prize in electronic production competition of *NWPU*  
School-level outstanding student

*Jun. 2015*  
*2014 – 2016*

## Skills

---

### Professional.....

- C, Python
- Keil, Cortex-M3 and M4 series developing
- Matlab, Latex
- Altium Designner, PCB designing

### Personal.....

- Self-motivation
- inventiveness
- cooperative
- industriousness