

# Guodan Dong

**Personal Website:** Guodan's Website

**GPA:** 4.0/4.0 (Master); 3.32/4.0 (Bachelor)

**GRE:** 320; **TOEFL:** 100

**English name:** Lisa Dong

**Telephone:** (+86) 15651781560

**E-mail:** luckydgdnew@gmail.com; 2425611599@qq.com

**Institution:** Nanjing University of Science and Technology (NJUST)

**Address:** 200 Xiaolingwei St., Xuanwu, Dist., Nanjing, Jiangsu, China 210094

## EDUCATION

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- **Master candidate (2017.9 - now)**

GPA: 4.0/4.0

Major in: Fluid Mechanics

National Key Laboratory of Transient Physics

Nanjing University of Science & Technology

- **Bachelor of safety engineering (2012.9 - 2016.6)**

GPA: 3.32/4.0

Major in: Chemistry

Department of Safety Engineering,

School of Chemical Engineering

Nanjing University of Science & Technology

## CURRENT RESEARCH FIELD

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**MHD Richtmyer-Meshkov instability**

**Shock waves interactions**

**Fluid Mechanics**

**Fluid-structure interactions (FSI)**

**Machine learning**

**Dynamic mode decomposition (DMD)**

## SKILLS

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- **Programing**

**C++:** Experience in using C/C++ based open source software (two years).

**Python/Jupyter notebook:** Experience in solving some basic partial differential equations and learning dynamic mode decomposition (DMD).

**Matlab/Octave:** Image processing, PDE, Machine Learning.

- **Commercial Software:** Fluent and ICEM.
- **Operating system:** Windows; Linux (Ubuntu).
- **Academic Tools:** Paraview; Tecplot; Latex; Sublime.
- **Sports:** Volleyball and Soccer.

## HONORS & AWARDS

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2018-2019: The excellent graduate student (Twice).

2017-2019: The first-class scholarship (Three times).

2014: Rewarded as a Social activity activist.

2013-2016: The Second and Third Prize Scholarship (Multiply Times).

2012-2013: The first-class prize for volleyball game.

## EXPERIENCE

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2017- now: A graduate student.

2016: Preparing for the graduate entrance examination.

2014: Industrial intern.

2013-2014: Part-time jobs (salesman, family tutor and the temperate teacher).

2012-2013: Participate in student union and Reb Cross Club.

## PEER REVIEWED PAPERS

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- *Dong Guodan*, Zhang Huanhao, Lin Zhenya, Qin Jianhua, Chen Zhihua. Numerical investigation of the interaction between shock waves and triangular cylinders in the presence of a magnetic field[J]. Acta Physica Sinica. 2018, 67(20). DOI: 10.7498/aps.67.20181127.
- *Dong Guodan* Guo Zeqing, Qin Jianhua, Zhang Huanhao, Jiang Xiaohai, Chen Zhihua Sha sha. Numerical investigations of Richtmyer-Meshkov instability in different magnetic field configurations and the corresponding Dynamic Mode Decomposition[J]. Acta Physica Sinica 2019 68 165201 DOI: 10.7498/aps.68.20190410.
- *Guodan Dong*, Jianhua Qin, Zhihua Chen. Numerical investigations of the Richtmyer-Meshkov instability of concave interfaces in hydrodynamics and magnetohydrodynamics[J]. (In preparation)
- Qin Jianhua, Jiang Xiaohai, *Dong Guodan*, Guo Zeqing, Chen Zhihua and Yiannis Andreopoulos. Numerical investigation on vortex dipole interacting with concave wall of different curvature[J]. Fluid Dynamics Research, 2018, 50(04): 5508. DOI :10.1088/1873-7005/aac59c.
- Qin Jianhua, Yiannis Andreopoulos, Jiang Xiaohai, *Dong Guodan* and Chen Zhihua. Combining immersed boundary Lattice Boltzmann method and finite element method to simulate the fluid-structure interactions and the corresponding DMD analysis. (In revision)

## CONFERENCE PAPER

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- *Dong Guodan*, Zhang Huanhao, Qin Jianhua, Lin Zhenya, Chen Zhihua. The Richtmyer-Meshkov instability in a square cylinder under a transverse magnetic field. 1st International Conference of Defense Technology, 2018.