#### YIZHAO GUAN

Gender: Male Age: 22 Nationality: Chinese

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#### **EDUCATION**

**Tohoku University** 

October 2015 - August 2019(Expected)

- Mechanical and Aerospace Engineering (IMAC Program, an international course taught in English).

High School Afflicted to China Fudan University

September 2012 - August 2015

### RESEARCH EXPERIENCE

(Work with professors and doctors as several international groups from British, India, Indonesia, Thai, etc.)

Fluid Dynamic (Ohnish Lab)

Fall Semester 2016

- Presentation of Lift improvement in supersonic flow by suppressing flow separation with repeatedly applied laser beam.
- Simulation of the air flow around the wing under applied laser beam and analyses lift improvement.

Fine Nano- Mechanics (Miura / Suzuki lab)

Academic year 2017

- Presentations in lab as below:
  - Highly-Sensitive Graphene Nano-Ribbon-Base Strain Sensor.
  - Surface Functionalized Graphene Biosensor on Sapphire for Cancer Cell Detection.
  - Presentation skill up and learning about Carbon-Nano-Tubes and graphene.

**CONFERENCE** Japan Society of Mechanical Engineers (JSME) Tohoku

September 2018

Presentation topic: First Principle Calculation on the electrical Conductivity of Dumbbell-shape Graphene Nano-Ribbon.

## **TEAM WORKS**

**Team based Research** 

Fall semester 2016

- We proposed a line navigation robot and realized this idea using Robolab. I participated in the assembling and programing.

#### **Professional development Consortium for**

**Computational Materials Scientists (PCoMS)** 

September 2018

- In this seminar, the topic "Computer based DFT (Density functional theory) simulation for corrosion resistance of aluminum" was proposed by our team. I did the final presentation while team members (an assistant professor and a doctor student) combined their ideas.

# PART TIME JOBS

Convenient store (Ministop Co., Ltd.) staff

September 2017 - October 2018

- Be promoted from C level to A level staff in 3 months.

Freshman tutor October 2017 - August 2018

- Support a new international student from Singapore in his study and daily life.

## **SKILLS & INTERESTS**

Technical Microsoft Office, C Language, Solid works (Design software).
Language Native Chinese, Fluent in English and Japanese (JLPT N1 level).

- Interests Basketball, Taichi (Martial Arts), Badminton, Guita

## **Personal Achievements & Honors**

- Finish undergraduate graduation courses in 6th semester (normal 8<sup>th</sup> semester), and start taking graduate school lectures.
- GPA: 3.34/4 Core courses: Obtain AA (GPA=4) in lectures below:

Heat Transfer (I,II), Control Engineering (I,II), Quantum Mechanics, Computer seminar.

- Tohoku University Honor President Fellowship.
- The Monbukagakusho Honors Scholarship (JASSO).
- Membership of The Japan Society of Mechanical Engineers.
- Enrolled in "elite training program" a study tour in Zhangye High school, Gansu, China.
- Participated in voluntary support education in Xiji, Ningxia, China.