YIZHAO GUAN

Gender: Male Age: 24 Nationality: Chinese

Email: guan.y@nanolab.t.u-tokyo.ac.jp TEL: (081)080-2385-3768

Add: Room 202, Building 14, ZhongChun Road No. 8888 Shanghai, China.

Personal site: https://lgyz123.github.io/yizhao/cv/

EDUCATION

The University of Tokyo October 2021 - September 2024 (expected)

- Doctor degree in Precision Engineering. (In Japanese)

The University of Tokyo October 2019 - September 2021

Master degree in Precision Engineering. (In Japanese)

Tohoku University October 2015 - September 2019

- Undergraduate degree in 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

- Simulation of the airflow around the wing under applied laser beam and analyses lift improvement.

Fine Nano- Mechanics (Miura / Suzuki lab) Academic year 2017

- Ab initio simulation for Graphene

Optical super-resolution (Takahashi / Michihata lab)

Academic year 2019-2021

- FDTD simulation for standing-wave illumination microscopy

CONFERENCES IN JAPAN

Japan Society of Mechanical Engineers (JSME) Tohoku September 2018

First Principle Calculation on the Electrical Conductivity of Dumbbell-shape Graphene Nano-Ribbon.

Japan Society of Mechanical Engineers Computational Mechanics Division (CMD) September 2019

Effect of Strain on the Gas Adsorption of Graphene: A First Principle Study

The Japan Society for Precision Engineering (JSPE) September 2020

The FDTD Analysis of Near-field Response for Microgroove Structure with Standing Wave Illumination

The Japan Society for Precision Engineering (JSPE)

March 2021

The FDTD Analysis of Near-field Response for Microgroove Structure with Standing Wave Illumination (2nd)

-The Relationship of Microgroove Depth and Near-field Phase Response

Optics & Photonics Japan (OPJ) September 2020

Optical FDTD Analysis of Surface Microstructure for Coherent Structured Illumination Microscopy

INTERNATIONAL CONFERENCES

Manufacturing Science and Engineering Conference (MSEC) March 2021

The FDTD Analysis of near-field response for microgroove structure with standing-wave illumination for the realization of coherent structured illumination microscopy (<u>Published in Journal of Manufacturing Science and Engineering</u>)

OPTICS & PHOTONICS International Congress (OPIC) April 2021

The FDTD Analysis for Diffraction Limited Microgroove Structure with standing-wave illumination for the realization of coherent structured illumination microscopy

International Measurement Confederation (IMEKO) August 2021

The FDTD Analysis for Dark Field In-process Depth Measurements of Fine Microgrooves (Published in Measurement: Sensors)

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 programming.

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 doctoral 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.

MEKO Education Group March 2020 -

- Application Tutor

Internship

Mazda Motor Corporation September 2019

- R&D department, Hiroshima, learning the jointing technology development of different metals

SKILLS & INTERESTS

- Technical Microsoft Office, C Language, Python, Matlab, Solid works (Design software), Blender.

- Language Native Chinese, Fluent in English (GRE 324) and Japanese (JLPT N1 level).

Interests Basketball, Taichi (Martial Arts), Badminton, Guitar

Personal Achievements & Honors

- JSPS DC1 (2022-2024)

- Outstanding graduation thesis award (修士論文優秀賞)
- Graduation GPA: 2.7/3
- Scholarship from Sumitomo Electric Industries Social Contribution Foundation
- Finish undergraduate graduation courses in the 6th semester (normally 8th semester), and start taking graduate school lectures.
- Undergraduation 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.