

# JUNGHWAN RO

Phone: (+82) 010-9388-9369  
[noru19@mnd.go.kr](mailto:noru19@mnd.go.kr)  
<https://www.nojunghwan.com>

Department of Mechanical & Systems Engineering  
Professor Officer, R.O.K. Naval Academy

## EDUCATION

---

- M.S. The University of Tokyo, Mechanical Engineering** **Tokyo, Japan**  
*GPA 3.73/4.00* *Mar. 2018*
- Thesis: "Reactivity Evaluation of Weak-Combustibility Fluids in Micro-Flow Reactor with Streamwise Temperature Gradient"*  
*Supervisor: Professor Yuji Suzuki*
- B.S. Okayama University, Mechanical & Systems Engineering** **Okayama, Japan**  
*GPA 3.53/4.00, Graduation with Honors (Kokusyo Award)* *Mar. 2016*
- Thesis: "A Study on the Control of Resolidified Layer Thickness in Large-Area EB Irradiation Method"*  
*Supervisor: Professor Akira Okada*

## PROFESSIONAL EXPERIENCE

---

- Division of Mechanical & Systems Engineering, ROK Naval Academy** **Jinhae, Korea**  
*Professor Officer (Lecturer)* *Apr. 2021 – Present*
- Provide lectures on mechanical engineering (Robotics, Fluid Mechanics, Introduction to Mechanical Engineering, Statics) for midshipmen and teach them STEM skills.
  - Research for the development of specialized fields and naval weapons systems.
  - Participate in the planning, development, and evaluation of the division curriculum.
  - Concurrently serve as an academic advisor of foreign exchange students from the United States, Japan, and the Republic of Turkey.
- 3<sup>rd</sup> Fleet Commander, ROK Navy** **Mokpo, Korea**  
*English-Korean Interpreter* *Aug. 2020 – Apr. 2021*
- Provided various interpretations for high-level receptions such as the U.S. Pacific Fleet Commander.
  - Prepared the Bell-Buoy Exercise, a multinational (12 nations) naval exercise to protect maritime trade.
- DDH-979, ROK Navy** **Jeju, Korea**  
*Engineering Officer* *Dec. 2019 – Aug. 2020*
- Electric branch head of DDH-979, main ship of ROK Navy; led a team of 11 engineering NCO/soldiers.
- Special Warfare Flotilla, ROK Navy** **Jinhae, Korea**  
*UDT/SEAL Trainee* *Feb. 2019 – Sep. 2019*
- Affiliated in the Basic Underwater Demolition/SEAL School; dismissed early due to injury.
- JLK Inspection** **Seoul, Korea**  
*Research Engineer* *Apr. 2018 – Aug. 2018*
- Developed an AI-based neurological disorder analysis solution that diagnoses dementia with an input of MRI images by building an algorithm and predicting blood flow inside the brain.

---

## HONORS AND AWARDS

---

- Chairman of the Joint Chiefs of Staff Award** *Dec. 2019*
- 2<sup>nd</sup> Place in the Naval Officer Training, Officer Candidate School
- Naval Education and Training Command Award** *Mar. 2019*
- 1/1404 in the Seaman Training; first 1,000/1,000 perfect score in ROK NETC History.
- The Global Leader Program for Social Design and Management** *Oct. 2016 – Mar. 2018*
- Fully funded interdisciplinary doctoral program to train top leaders for today’s global society.
  - Passed the Ph.D. qualifying exam; withdrew to join the ROK military.
- Kokusyo Award** *Mar. 2016*
- Received as top 2 out of 526 engineering graduates; an award conferred to “excellent undergraduate students, both for academic achievements and integrity upon recommendation by each dean.”
- Korea-Japan Joint Government Scholarship Program** *Apr. 2012 – Mar. 2016*
- Fully-funded joint government scholarship covering all study abroad costs; awarded to 100 students a year.

---

## CONFERENCES

---

### *International Conference Proceedings*

[1] **J. Ro**, Y. Fan, K. Morimoto, Y. Suzuki, “Reactivity Evaluation of Weak-Combustibility Fluids in Micro-Flow Reactor with Streamwise Temperature Gradient,” in *The Ninth JSME-KSME Thermal and Fluids Engineering Conference (TFEC 2017)*, October 27-30, 2017, Okinawa, Japan, 6pp., Paper No. 1603.

### *Other Conference Proceedings and Presentations*

[2] **J. Ro**, Y. Fan, K. Morimoto, and Y. Suzuki, “Investigation on the Reactivity of Weak-Combustible Fluid using Micro Flow Reactor,” in *Proceedings of the 54th Heat Transfer Symposium*, May 24-26, 2017, Omiya, Japan, 6pp, A233. (In Japanese).

[3] **J. Ro**, T. Shinonaga, and A. Okada, “A Study on the Control of Resolidified Layer Thickness in Large-area EB Irradiation Method,” in *The Proceedings of Conference of Chugoku-Shikoku Branch*, February 9, 2016, Shikoku, Japan, Paper No. 407. (In Japanese).

---

## ADDITIONAL EXPERIENCES

---

- Division of Mechanical & Systems Engineering, ROK Naval Academy** **Jinhae, Korea**  
*Acting Chair during the Chair’s Absence* *Sep. 2021 – Jan. 2022*
- Research and Business Development Foundation, ROK Naval Academy** **Jinhae, Korea**  
*Research Administrator* *Jul. 2021 – Present*
- Korean Student Association, The University of Tokyo** **Tokyo, Japan**  
*45<sup>th</sup> President leading 465 Korean international students* *Apr. 2017 – Mar. 2018*

---

## COMMUNITY SERVICE

---

- Core Member, Unicul Laboratory* *Apr. 2016 – Jan. 2017*
- Guided and taught middle and high school students to find their true dreams.
- Babysitter, Sankaku Okayama Childcare* *Apr. 2014 – Apr. 2015*
- Babysat children from 6 months to 10 years old in a government facility.

---

## LANGUAGES

---

**Korean:** Native / **English:** TOEFL 104 (C1 or above, ROKN Interpreter) / **Japanese:** JLPT N1 (C1 or above)