Takeshi (Ryan) Fujimoto

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Education

M.S. in Aerospace Engineering (Expected Graduation March 2021) **March 2021**
Yokohama National University, Yokohama, Japan

- Won multiple **scholarships**

B.S. in Mechanical Engineering **March 2019**
Yokohama National University, Yokohama, Japan

- **Dean's Award** (March 2019)
- **3.99** Overall GPA, magna cum laude
- **Early** assigned to the Aerodynamic laboratory (March 2017)
- Won multiple **scholarships**

Research Experience

2019-2021 Developed Limiter and Artificial Viscosity for CPR method in CFD. Under the guidance of Prof. ZJ Wang at **University of Kansas**.

2017-2021 Developed shock wave detection method for high-speed computational flows designed to be both efficient and theoretically accurate. Under the guidance of Prof. Keiichi Kitamura at **Yokohama National University**.

Spring 2018 Developed noise reduction algorithm for Pressure- and Temperature-Sensitive Paint method. Under the guidance of Prof. Hirotaka Sakaue at **University of Notre Dame**.

Honors and Awards

2019 Student Award, 32nd International Symposium on Shock Waves, National University of Singapore/Singapore

2019 Dean's Award, Yokohama National University, Yokohama/Japan

2018 Outstanding Research & Performance Award, The Japan Society for Aeronautical and Space Sciences, Miyazaki/Japan

2018 Outstanding Research & Performance Award, Ministry of Education, Culture, Sports, Science and Technology of Japan, Tokyo/Japan

2018 Best Research & Presentation Award, The Japan Society for Aeronautical and Space Sciences, Tokyo/Japan

2017 Best Research & Presentation Award, Yokohama National University, Yokohama/Japan

Scholarships

2019-2020 Japan Public-Private Partnership Student Study Abroad Program "TOBITATE! Young Ambassador Program" Tokyo/Japan

2019-2021 Furukawa Foundation, Tokyo/Japan

2019-2021 Kawamura Scholarship Foundation, Tokyo/Japan

2019-2021 Omori Shozou Foundation, Saitama/Japan

2019-2020 Tomomi Iwasaki Scholarship Foundation, Yokohama/Japan

2019 Yokohama Academic Foundation, Yokohama/Japan

2017-2018 ROUTE Fellowships for research, Yokohama National University

2017-2019 Nisshin-Sugar Scholarship, Nisshin-Sugar Foundation, Tokyo/Japan

2017-2019 Sato-Sadao Scholarship, Sato-Sadao Foundation, Yokohama/Japan

Publications

2019 **Fujimoto T.R.**, Kawasaki T., Kitamura K., Canny-Edge-Detection/Rankine-Hugoniot-conditions unified shock sensor for inviscid and viscous flows, ***Journal of Computational Physics***, Vol 396, pp264-279, doi.org/10.1016/j.jcp.2019.06.071

2018 **Fujimoto T.R.**, Kawasaki T., Kitamura K., Simpler Method of Shock Wave Detection by Using Canny Method, AIAA 2018-4274, 2018

Presentations

2020 **Fujimoto T.R.**, Wang Z.J., Kitamura K., 14th WCCM & ECCOMAS Congress 2020, Paris, France (Expected)

2019 **Fujimoto T.R.**, Kitamura K., Efficient and Accurate Shock Sensor for CFD Solutions on Curvilinear Grids, 32nd International Symposium on Shock Waves, NUS, Singapore (***Awarded***)

2018 **Fujimoto T.R.**, Kawasaki T., Kitamura K., Simpler Method of Shock Wave Detection by Using Canny Method, AIAA Aviation, Forum, (AIAA 2018-4274), doi.org/10.2514/6.2018-4274 (oral)

Skills

- Languages:
  Fluent in English/Japanese
- Computer Languages:
  Fortran(77, 90/95), C++, C, Matlab, Bash, Python, LaTeX
- Other Computer Skills:
  Deep Learning, Machine Learning, Linux Programming, Image Processing
- Adaptability
- Critical Thinking