

# RINTARO SATO

1st-year Master's student in CS

Key Terms: Computer Vision, Reinforcement Learning, Combinatorial Optimization

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LinkedIn ◦ <https://www.linkedin.com/in/rintarooo>

## EDUCATION

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### **Tsukuba University**

M.E. in Computer Science.

Overall GPA: -

Japan

*Apr 2021 - present*

### **Kyushu University**

B.E. in Mechanical Engineering.

Thesis Theme: Solving The-Multi Depot Vehicle Routing Problem using Deep Reinforcement Learning

Overall GPA: 3.31/4.00

Japan

*Apr 2016 - Mar 2021*

## TECHNICAL STRENGTHS

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### **Coding**

C / C++ / Python3 / MATLAB / R / PostgreSQL / Shell Script

### **DL Framework**

PyTorch / TensorFlow / Keras

### **CV/ML Library**

OpenCV / PCL / OpenAI Gym / Scikit-Learn

### **3D Modeling**

Creo Parametric

### **Other Tools**

Linux(Ubuntu) / Docker / Git / Vim / L<sup>A</sup>T<sub>E</sub>X / CMake

### **Launguage**

fluent in English(TOEFL iBT: 78/120 / TOEIC: 925/990) / Japanese(native)

## INTERNSHIP

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### **Fusic Co., Ltd.**

Research Engineer(Computer Vision) in Machine Learning Team

Japan

*part-time, Aug - Sep 2020*

- Perform color space conversion to RGB images with LAB / HSV and other image processing.
- Build person's image classification model using Deep Metric Learning / SVM / Decision Tree.

### **Panasonic R&D Center Singapore**

Research Engineer(Computer Vision) in Learning&Vision Team

Singapore

*full-time, Dec 2019 - Mar 2020*

- Work on projects in the following fields, Video Analysis, Action Recognition(event scene detection in Basketball videos, surveillance videos of prison).
- Build classification models(e.g., 3D-CNN, Two-Stream model with Optical Flow) on public dataset(e.g., UCF101, UCF-Crime) and our own dataset.
- Research SotA(State-of-the-Art) model architecture and training method, tune hyperparameter, evaluate pre-trained model performance.

## EXTRA-CIRRUCULAR

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### **TU Bergakademie Freiberg**

Internship Program

Germany

*Sep - Nov 2019*

- Conduct TGA(thermogravimetric analysis) experiments
- Analyze results of experimental data with Python, pandas.

### **University of Illinois at Urbana-Champaign**

America

Research Exchange Program

*Feb - Mar 2019*

- Analyze images and videos for the oscillation of the water droplets on hydrophobic surfaces using MATLAB and high speed camera.

### **SEEDS**

Iceland

International Volunteer

*Aug - Sep 2018*

- Work on nature and environmental oriented tasks including maintaining hiking paths, building stairs and collecting pine cones that are used to plant again in the forest in the North of Iceland.

### **University of Cambridge**

England

Summer Course Program

*Aug - Sep 2017*

- Learn Academic Writing and Speaking, Visual Arts and Architecture in Cambridge.

## PUBLICATION

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The 83rd National Convention for Information Processing Society of Japan(IPSJ)

*Mar 2021*

### **Solving The Multi-Depot Vehicle Routing Problem using Deep Reinforcement Learning**

Rintaro Sato, Yasutaka Tsuji

## AWARD

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Student Encouragement Award of The 83rd National Convention for Information Processing Society of Japan(IPSJ)

*Mar 2021*

## SCHOLARSHIP

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### **JEES/Softbank AI Scholarship**

*Mar 2021*

- Scholarship for the Master's students who are engaged in research on Artificial Intelligence in the field of Information Engineering/Science and Statistics

### **Tobitate Young Ambassador Scholarship**

*Aug 2019*

- Scholarship for the students to develop into globally minded professionals needed by society, especially industry, and who can succeed in a global world

## CERTIFICATION

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Databases and SQL for Data Science on Coursera	<i>Aug 2020</i>
Accelerated Computer Science Fundamentals Specialization(Ordered Data Structures, Unordered Data Structures, Object-Oriented Data Structures in C++) on Coursera	<i>Apr 2020</i>
Convolutional Neural Networks on Coursera	<i>Aug 2019</i>
Sequence Models on Coursera	<i>Aug 2019</i>
Neural Networks and Deep Learning on Coursera	<i>Aug 2019</i>
Advanced Open Water Diver on PADI	<i>Sep 2016</i>