# RINTARO SATO

## 1st-year Master's student in CS

Key Terms: Computer Vision, Reinforcement Learning, Combinatorial Optimization

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#### **EDUCATION**

Tsukuba University

Japan

M.E. in Computer Science.

Apr 2021 - present

Overall GPA: -

Kyushu University

Japan

B.E. in Mechanical Engineering.

Apr 2016 - Mar 2021

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

Overall GPA: 3.31/4.00

#### TECHNICAL STRENGTHS

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

DL Framework PyTorch / TensorFlow / Keras

Library OpenCV / PCL / OpenAI Gym / Scikit-Learn

**3D Modeling** Creo Parametric

Other Tools Linux(Ubuntu) / Docker / Git / Vim / LaTeX / CMake

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

#### **INTERNSHIP**

Fusic Co., Ltd.

Japan

Research Engineer (Computer Vision) in Machine Learning Team

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

Singapore

Research Engineer (Computer Vision) in Learning & Vision Team

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., UCF-101, 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

### TU Bergakademie Freiberg

Germany

Internship Program

- 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

Sep - Nov 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**

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

Student Encouragement Award of The 83rd National Convention for Information Processing Society of Japan(IPSJ)  $Mar\ 2021$ 

#### **SCHOLARSHIP**

## JEES/Softbank AI Scholarship

Mar 2021

- Scholarship for the Master's students who are engaged in research on Artificial Intelligence in the filed 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**

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