

Dan Ogawa Lillrank

Robotics Researcher/Software Engineer

Areas of specialization

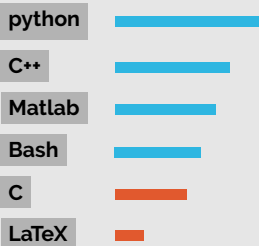
Robotics Automation (Software)

- Manipulation
 - Inverse Kinematics
 - Trajectory Planning
 - (Deep) IL/RL in robotics
- Simulation:
 - IsaacSim
 - Mujoco (sim2real)
 - Drake
 - pybullet
- Navigation:
 - SLAM
 - Path Planning

Machine Learning

Reinforcement Learning (RL)
Imitation Learning (IL)
Computer Vision
Deep Learning

Programming



Technical

Linux, Pytorch, scikit-learn,
ROS(Moveit!), OpenCV, PCL,
CUDA, MPI, Docker, Git, Jira,
Confluence,

Languages

Language	Proficiency
English	Fluent
Swedish	Native
Japanese	Native

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SHORT RESUMÉ

2021-2024

Araya

CHIEF RESEARCHER · Tokyo, Japan

Researcher in Neurotechnology R&D Unit, Deep Reinforcement Learning research team.

Main Project Brain Machine Interface.

Setup the full robotics stack from scratch as the only robotics expert.

Franka robot arm was used with ROS+Moveit! and PerAct, an imitation learning algorithm to execute task specified by brain signals. Supervised junior researchers and a research engineer for the above project. Team grew from 2 to 8.



2020-2021

Telexistence

ROBOTICS SOFTWARE ENGINEER · Tokyo, Japan

Main software integrator for the automation team. Implemented Pick & Place workflow for the Model-T humanoid upper-torso robot by integrating perception and planning/control modules using ROS. Integration tested on the custom robot hardware. Integrated several custom grippers to the robot.



PUBLICATIONS

- 2024 **A pragmatic look at deep imitation learning.**
Asian Conference on Machine Learning.
- 2024 **A comparison of visual and auditory EEG interfaces for robot multi-stage task control**
Frontiers in Robotics and AI
- 2019 **Registration algorithms for matching laser scans in robotics application**
Thesis work in KTH diva portal

EDUCATION

- 2019 **KTH Royal Institute of Technology, Sweden**
M.Sc · Systems, Control & Robotics
- 2017 **KTH Royal Institute of Technology, Sweden**
B.Sc · Engineering Physics
- 2017 **Kyoto University, Japan**
· Exchange student

OTHER EXPERIENCES

2020-2021

AIST National Institute of Advanced Industrial Science & Technology

TECHNICAL STAFF · Tokyo, Japan

Technical Staff/Research at AIST Automation Research team, working closely with Ogata lab. Utilizing Deep Predictive models for manipulation tasks.



2019-2020

Qbit Robotics

ROBOTICS SOFTWARE ENGINEER · Tokyo, Japan

Integrating the Facial recognition & tracking system using ROS & Docker with python. Designed & implemented a multi-object tracking. Proposed & created a pipeline to store the customer tracking information in the cloud. Data-visualization was delivered to the sales team & store manager.

