

# Kenichi Sasaki

kenichi.sasaki@colorado.edu · +1 720 229 3344 ·

labusers.net/ ksasaki/

Boulder, CO, USA

## EDUCATION

---

### Ph.D. Aerospace Engineering and Sciences

University of Colorado Boulder

2019-2023 (*Expected*)

### M.S. Mechanical Engineering

Tokyo Institute of Technology, CGPA: 3.5/4

2016-2019

### B.S. Mechano-Aerospace Engineering

Tokyo Institute of Technology, CGPA: 3.4/4

2012-2016

## EXPERIENCE

---

### Computer Vision Internship

Orbital Insight - Palo Alto, CA

Development of incremental learning framework using self-supervised learning

May 2022-Aug 2022

### Data Analyst

Tenchijin inc. - Tokyo, Japan

Geospatial land evaluation engine development

Sept 2020-Current

### Software Engineer Intern

Amanogi inc. – Tokyo, Japan

Smallsat's optical components manufacturing and satellite imagery analysis

Sept 2018 - Jul 2019

### Mechanical Engineer Intern

ispace inc. – Tokyo, Japan

Moon rover and lander design, under Google Lunar

XPRIZE competition

Sept 2017 - Mar 2018

## AWARDS

---

- **Tokyo Tech Engineering Science Awards**  
2016
- **KDDI Foundation Fellow**  
KDDI Foundation Graduate Program Fellowship  
2019

## TECHNICAL SKILLS

---

### Relevant Coursework

Machine Learning, Optimization, Remote Sensing Data Analysis, Atmospheric Radiative Transfer Theory, Statistical Learning Theory, Applied Statistics, Fluid Mechanics

**Coding Platform** Python, Docker, AWS, Git, GDAL, GRIB, HDF5, C++, Matlab, Visual Studio, Shell, Eclipse, R, C#, SQL, JavaScript, HTML, CSS, Kubernetes, MLflow

**Analysis Platform** Numpy, Scipy, Geospatial python libraries, Pytorch, Tensorflow, Keras, Neptune, Optuna, Scikit-learn, OpenCV, Matplotlib, Plotly

**GIS Platform** QGIS, Google Earth Engine, ArcGIS Pro, OpenStreetMap

**Github** [github.com/KenichiSasaki]

## PROJECTS

---

**Coastal Cleanup using Satellite and Drone** [ikkaku]

Marine debris monitoring by satellite imagery, Drone and ground truth data

*Optical images, SAR*

**Runtime Radio Attenuation Analysis** [ETS-9]

Establish large-scale precipitation nowcast model and estimate radio attenuation for ETS-9 mission to achieve next generation 5G satellite communication

*Radar, LST*

**Oil Spill Analysis**

Oil slick quantification on an incident near Mauritius by satellite image time series

*SAR*

**Carbon Sequestration Modeling**

Evaluate the weather and geographical traits to screen the optimal inter-crops

*Weather data, GIS*

**Deep Learning Attitude Sensor** [DLAS]

On-board runtime image segmentation for attitude determination of satellites

*Optical images*