

# Kazuya Nishimura

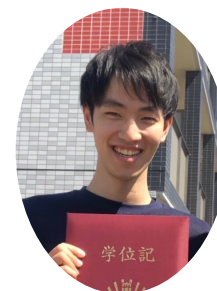
Laboratory of Computational Life Science, National Cancer Center.

5-1-1 Tshukiji, Chuo-ku, Tokyo, 104-0045 Japan

Mobile: (+81)80-1946-6773 Email: kanishi4@ncc.go.jp

Github: <https://github.com/naiivete5656>

Google scholar: <https://scholar.google.com/citations?user=5I6-5kEAAAAJ&hl=en>



---

## EDUCATION

### National Cancer Center, Tokyo, Japan

Project researcher

Apr. 2024-Present.

### Kyushu University, Kyushu, Japan

PhD, Computer Science

Apr. 2021-Mar. 2024

M.S. in Electrical Engineering and Computer Science

Apr. 2019-Mar. 2021

B.S. in Electrical Engineering and Computer Science

Apr. 2017-Mar. 2019

- Cumulative GPA 3.28/4.0

- Thesis title:

”Weakly supervised instance cell segmentation in phase contrast microscope”

### Matsue Technical College, Shimane, Japan,

A.S. in Control engineering.

2017

- President of student government

---

## WORK EXPERIENCE

### OMRON SNIC X, Tokyo, Japan

Research Internship

Jul. 2023 to Mar. 2024

- Automate relate-work generation with structure and nocelty

### Data science summer internship, Lawrence Livermore national, U.S.

Research Internship

Jun 2022 to Sep. 2022

- Detection of earth trojan asteroid

### Instructor at Standard Ltd., Kyushu, Japan

Part time job

June 2018 to Oct. 2019

- Lectured about artificial intelligence

### Web Programmer at Fringe81 Co. Ltd., Tokyo, Japan,

Aug. 2017 to Sept. 2017

Two weeks internship

- Programming Language: Javascript

---

## SKILLS

- Language
  - Japanese: Native
  - English: Intermediate
- Programming Languages: Python, Matlab, Javascript, C, Linux, HTML
- Deep learning library skills (keras, pytorch, tensorflow)

---

## QUALIFICATION

Applied Information Technology Engineer Examination

2018

---

## MAIN PUBLICATION

---

### Journal

- **Kazuya Nishimura**, Chenyang Wang, Kazuhide Watanabe, Dai Fei Elmer Ker, Ryoma Bise, "Weakly Supervised Cell Instance Segmentation under Various Conditions", In Medical Image Analysis(MIA), 2021 [[link](#)]

### Conferences (Major publications)

- Kazuya Nishimura, Ryoma Bise, "Weakly Supervised Cell-Instance Segmentation With Two Types of Weak Labels by Single Instance Pasting", Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision. 2023.
- **Kazuya Nishimura**, Hyeonwoo Cho and Ryoma Bise, "Semi-supervised Cell Detection in Time-lapse Images Using Temporal Consistency", In Medical Image Computing and Computer-Assisted Intervention (MICCAI), 2021 [[link](#)]
- Junya Hayashida, **Kazuya Nishimura** and Ryoma Bise, "MPM: Joint Representation of Motion and Position Map for Cell Tracking.", In Computer Vision and Pattern Recognition (CVPR), United States of America, June 2020 (Oral) [[link](#)]
- **Kazuya Nishimura**, Junya Hayashida, Chenyang Wang, Dai Fei Elmer Ker, Ryoma Bise, "Weakly-Supervised Cell Tracking via Backward-and-Forward Propagation", In European Conference on Computer Vision (ECCV), pp. 104-121, August, 2020 [[link](#)]
- **Kazuya Nishimura**, Dai Fei Elmer Ker and Ryoma Bise, "Weakly Supervised Cell Instance Segmentation by Propagating from Detection Response.", In Medical Image Computing and Computer-Assisted Intervention (MICCAI), pp. 649-657, China, October, 2019 [[link](#)]

and others. Please see [google scholar](#) for more details.

---

## RESEARCH INTEREST

---

### Label efficient learning (LEL).

Subcategories: Weakly or semi or self or unsupervised learning, Tracking, Segmentation

---

## AWARDS

---

CVPR 2019 Contest on Mitosis Detection in Phase Contrast Microscopy Image Sequences

**2nd place** <http://media.m2i.ac.cn/mitosisdetection/results/>

Kazuya Nishimura, Junya Hayashida, Ryoma Bise, "3D Convolutional Mitosis Detection Trained as Regression Problem.", 2019

### Best Presentation Award:

"Cell mitosis detection with 3D CNN and regression problem.", Kazuya Nishimura, Junya Hayashida, Ryoma Bise), Technical Committee on Pattern Recognition and Media Understanding, Sept. 2019 (domestic conference).

### MIRU Encouragement Award:

"Weakly-supervised cell segmentation in microscopy image.", Kazuya Nishimura, Ker Dai Fei Elmer, Ryoma Bise), The 22th Meeting on Image Recognition and Understanding, Jul. 2019 (domestic conference).

### Contribution Award:

"Weakly-supervised cell segmentation.", Kazuya Nishimura, Ker Dai Fei Elmer, Ryoma Bise, The 15th Joint Workshop on Machine Perception and Robotics, Nov. 2019.

---

## GRANTS

---

<b>Research Fellowships for Young Scientists (DC1)</b>	<b>2021-2024</b>
<b>JST ACT-X "AI powered Research Innovation / Creation"</b>	<b>2021-2024</b>
<b>Accelerate-phase</b>	<b>2024-present</b>
<b>Research Fellowships for Young Scientists (PD)</b>	<b>2024-present</b>