

# Naoki KITA

PH.D

ASSISTANT PROFESSOR

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## Summary

I am an assistant professor at Tokyo University of Agriculture and Technology. I received my Ph.D. at Japan Advanced Institute of Science and Technology (JAIST). I received my B.S. degree in science from Kanazawa University in 2009, and my M.S. in knowledge science from JAIST in 2011. My current research interests include computational design/fabrication and human visual perception, especially in layout/arrangement for discrete elements.

## Education

### Japan Advanced Institute of Science and Technology (JAIST)

Japan

PH.D. IN KNOWLEDGE SCIENCE

Apr. 2016 - Mar. 2019

- Thesis: Computational Design of Discrete Element Layouts
- Advisor: Kazunori Miyata

### Japan Advanced Institute of Science and Technology (JAIST)

Japan

M.S. IN KNOWLEDGE SCIENCE

Apr. 2009 - Mar. 2011

- Thesis: Interactive Procedural Modeling of Pebble Mosaics
- Advisor: Kazunori Miyata

### Kanazawa University

Japan

B.S. IN SCIENCE

Apr. 2005 - Mar. 2009

- Advisor: Toyoko Arai

## Experience

### Visual Computing Laboratory, Tokyo University of Agriculture and Technology

Japan

ASSISTANT PROFESSOR

Apr. 2019 - PRESENT

### READi Design Lab, L'École de design Nantes Atlantique

France

VISITING RESEARCHER

Feb. 2017 - Nov. 2017

- Joined IDEA (Immersive Data Exploration & Analysis) project and developed immersive VR applications.

### JAIST-DNIC (Dependable Network Innovation Center)

Japan

PROJECT RESEARCHER

Aug. 2013 - Mar. 2016

- Developed a skill map for CYDER (CYber Defense Exercise with Recurrence) project hosted by Ministry of Internal Affairs and Communications.

### Kanazawa Medical University

Japan

COLLABORATIVE RESEARCHER

Apr. 2011 - Mar. 2016

- Developed an NRBCs (Nucleated Red Blood Cell) autodetect system for non-invasive fetal DNA diagnosis from maternal blood.

## Allied Telesis Research Institute, Ltd.

SOFTWARE ENGINEER

Japan

Feb. 2015 - Oct. 2015

- Developed an in-house web service on Scala/Play Framework.
- Developed an e-learning system on Moodle and a cyber security lecture course.

## JAIST (Japan Advanced Institute of Science and Technology)

RESEARCH ASSISTANT

Japan

Apr. 2012 - Mar. 2013

## IPA MITOH Program

PROJECT LEADER

Japan

Feb. 2012 - Aug. 2012

- Funded for half a year as a project leader of an exploratory IT Human Resources Project (THE MITOH Program), and developed a discrete element texture generation application.

# Publications

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## INTERNATIONAL JOURNALS

[N. Kita](#), K. Miyata, "Computational Design of Polyomino Puzzles", The Visual Computer, Vol.36, No.9, 2020.

[N. Kita](#) and T. Saito, "Computational Design of Generalized Centrifugal Puzzles", Computers & Graphics, Vol.90, pp.21–28, 2020.

[N. Kita](#), Grégoire Cliquet, and K. Miyata, "Mapping Two-Dimensional Plots to a Spherical Surface using Elliptical Grid Mapping", Graphical Models, Vol.109, 101067, 2020.

M. Mardani, H. Mardani, L.-D. Simone, S. Varas, [N. Kita](#), and T. Saito, "Integration of Machine Learning and Open Access Geospatial Data for Land Cover Mapping", Remote Sensing, Vol.11, No.16, 1907, 2019.

[N. Kita](#) and K. Miyata, "Magic sheets: Visual cryptography with common shares", Computational Visual Media, Vol.4, No.2, pp.185–195, 2018.

[N. Kita](#) and K. Miyata, "Aesthetic Rating and Color Suggestion for Color Palettes", Computer Graphics Forum, Vol.35, No.7, pp.127–136, 2016.

[N. Kita](#) and K. Miyata, "Multi-class anisotropic blue noise sampling for discrete element pattern generation", The Visual Computer, Vol.32, No.6, pp.1035–1044, 2016.

## INTERNATIONAL CONFERENCES (ORAL PRESENTATION)

[N. Kita](#), K. Miyata, and T. Saito, "Computational Design of Polyomino Puzzles", Computer Graphics International (CGI 2020), Geneva, Switzerland (October 2020).

[N. Kita](#), Grégoire Cliquet, and K. Miyata, "Mapping Two-Dimensional Plots to a Spherical Surface using Elliptical Grid Mapping", CVM 2020, Macau, China (September 2020).

[N. Kita](#) and T. Saito, "Computational Design of Generalized Centrifugal Puzzles", Shape Modeling International (SMI 2020), Strasbourg, France (June 2020).

C. Sato, [N. Kita](#), and T. Saito, "Generating Route Panoramas for Street Guide Maps", The 6th IEEEJ International Conference on Image Electronics and Visual Computing (IEVC 2019), Bali, Indonesia (August 2019).

H. Watai, [N. Kita](#), and T. Saito, "Two-Dimensional Flow Field Visualization Using Hierarchical Poisson Disk Sampling", The 6th IEEEJ International Conference on Image Electronics and Visual Computing (IEVC 2019), Bali, Indonesia (August 2019).

M. Iwasaki, [N. Kita](#), and T. Saito, "Natural Extension Method of Video Length", The 6th IEEEJ International Conference on Image Electronics and Visual Computing (IEVC 2019), Bali, Indonesia (August 2019).

[N. Kita](#) and K. Miyata, "Magic Sheet: Visual Cryptography with Common shares", CVM 2018, Shanghai, China (April 2018).

N. Kita and K. Miyata, "Aesthetic Rating and Color Suggestion for Color Palettes", Pacific Graphics (PG 2016), Okinawa, Japan (October 2016).

N. Kita and K. Miyata, "Multi-class anisotropic blue noise sampling for discrete element pattern generation", Computer Graphics International (CGI 2016), Heraklion, Crete, Greece (June 2016).

N. Kita and K. Miyata, "Interactive Procedural Modeling of Pebble Mosaics", ACM SIGGRAPH Asia 2011 Sketches, ACM SA'11, Article 35, pp.35:1–35:2, Hong Kong, China (December 2011).

K. Ishibashi, T. Da Luz, R. Eynard, N. Kita, N. Jiang, H. Segi, K. Terada, K. Fujita and K. Miyata, "Spider Hero", Laval Virtual Revolution 2010, An.3, Laval, France (April 2010).

K. Ishibashi, T. Da Luz, R. Eynard, N. Kita, N. Jiang, H. Segi, K. Terada, K. Fujita and K. Miyata, "Spider Hero: A VR application using pulling force feedback system", VRCAI 2010, Session 7, Tokyo, Japan (December 2009).

## Honors & Awards

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2019	<b>Outstanding Performance Award in the doctoral program</b> , JAIST
Jul 2018 - Mar 2019	<b>JAIST Research Grant (Fundamental Research) 2018</b> , Japan Advanced Institute of Science and Technology
2018	<b>Excellent Poster Award</b> , JAIST World Conference 2018
Apr 2017 - Mar 2019	<b>JSPS Young Research Fellowship (DC2)</b> , Japan Society for the Promotion of Science
Feb 2017 - Nov 2017	<b>JAIST Grant for Off-Campus Research</b> , Japan Advanced Institute of Science and Technology
Apr 2016 - Mar 2017	<b>JAIST Doctoral Research Fellowship (DRF)</b> , Japan Advanced Institute of Science and Technology
2016	<b>Outstanding Poster Award</b> , JAIST HLD International Symposium 2016
Feb 2012 - Aug 2012	<b>The Exploratory IT Human Resources Project (THE MITOH Program)</b> , Information Technology Promotion Agency Japan (IPA)
2011	<b>Outstanding Performance Award in the master program</b> , JAIST
2011	<b>Best Paper Award</b> , 10th NICOGRAPH Spring
2010	<b>Campus Genius Award SILVER (Interactive)</b> , 15th Campus Genius Award

## Skills

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**Programming** Python, Ruby, C++, C#, Java, JavaScript  
**Languages** Japanese (Native), English (Intermediate)