

Yuta Tokuoka

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Personal

He received the B.E. and M.E. degrees in Biosciences and Informatics from Keio University, in 2016 and 2018, respectively. He joined the School of Fundamental Science and Technology at Keio University in 2018, where he is currently a Ph.D. candidate under the supervision of Dr. Akira Funahashi. His research interests include computer vision, machine learning, and developmental biology.

Education

Ph.D. Student, Biosciences and Informatics, Keio University, 2018–Now.

Master of Engineering, Biosciences and Informatics, Keio University, 2016–2018.

Bachelor of Engineering, Biosciences and Informatics, Keio University, 2012–2016.

Professional Experience

Preferred Networks, Inc. Summer Intern and Part-time Engineer 2018–2019

Publications and Preprints

Preprints

Yuta Tokuoka, Takahiro G Yamada, Noriko F Hiroi, Tetsuya J Kobayashi, Kazuo Yamagata, Akira Funahashi, "Convolutional Neural Network-Based Instance Segmentation Algorithm to Acquire Quantitative Criteria of Early Mouse Development," *BioRxiv* (2018): 324186.

Shori Nishimoto, Yuta Tokuoka, Takahiro G Yamada, Noriko F Hiroi, Akira Funahashi, "Predicting the future direction of cell movement with convolutional neural networks," *BioRxiv* (2018): 388033.

Software Developments

Quantitative Criteria Acquisition Network (QCANet)

<https://github.com/funalab/QCANet>

Grouping Neural Network

<https://github.com/tokkuman/GroupingNN>

Honors and Fellowships

JSPS Research Fellowship for Young Scientists (DC2), 2019

Amano Institute of Technology fellowship, 2018

GTC Japan 2017 Best poster award finalist, 2017

Technical and Personal Skills

Coursework

Experimental/theoretical cell biology, developmental biology, machine learning, computer vision, statistics, nonlinear dynamics, ordinary/partial differential equations

Computing

Proficient: Python, C/C++, Git/GitHub/GitLab, Chainer

Basic: Docker, Java, JavaScript, Tensorflow, Keras, PyTorch

Last updated: May 24, 2019

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