

Tomoyuki Suzuki

Applied Research Scientist at CyberAgent

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INTERESTS

Computer vision and Machine learning

- Video/Image Decomposition for creative work
- Video/Image/Multimodal Representation Learning
- Efficient Video Recognition
- Action Recognition

EDUCATION

Ph. D. in Computer Science, Keio Univ.

Oct 2021 -March 2024 (expected), Japan

Supervisor: [Prof. Yoshimitsu Aoki](#)

Theme: "Efficient Video Recognition with Transformers: Tackling the Redundancy in Video"

M.S. in Computer Science and Electronic Engineering, Keio Univ.

Apl. 2017 - Mar. 2019, Japan

Supervisor: [Prof. Yoshimitsu Aoki](#)

Theme: "Few-shot Domain Adaptation for Human Pose Estimation"

B.E. in Electronics and Electrical Engineering, Keio Univ.

Apl. 2013 - Mar. 2017, Japan

Supervisor: [Prof. Yoshimitsu Aoki](#)

Theme: "Video Action Recognition via Human Pose-centric Learning"

WORK EXPERIENCE

CyberAgent, Inc.

Aug. 2020 -Present, Japan

Research Scientist (full-time)

- Computer vision (+multimodal) research for creative work (e.g., video/image decomposition, representation learning for creative content, video structuring, audio source separation for ads).
- R&D on image and video advertisement effectiveness prediction.

DeNA Co., Ltd. / Mobility Technologies Co., Ltd.

Apr. 2019 - July 2020, Japan

Research Engineer (full-time)

- Lead R&D of driver's action recognition and implement it as a core feature in the driver assistance product, [DRIVE CHART](#) (presentation on [YouTube](#)).
- Write a survey blog about video recognition ([link](#)) and make a report on CVPR 2019 ([SlideShare](#)).

Recruit Holdings Co., Ltd.

Aug. 2017 - Mar. 2018, Japan

Data Scientist (intern)

- R&D on ad text generation from thumbnail images.

AIST (National Institute of Advanced Industrial Science and Technology)

May. 2017 - Mar. 2019, Japan

Research Scientist (intern), Supervisor: [Dr. Hirokatsu Kataoka](#)

- Two first-author papers on video recognition (CVPR 2018, ECCVW 2018)
- A comprehensive survey of unsupervised representation learning ([SlideShare](#)).

REPRESENTATIVE PUBLICATIONS

International conference (peer-reviewed)

- **Tomoyuki Suzuki**, Kotaro Kikuchi, Kota Yamaguchi, “Fast Sprite Decomposition from Animated Graphics”, ECCV 2024.
- Shoko Sawada, **Tomoyuki Suzuki**, Kota Yamaguchi, Masashi Toyoda, "Visual Explanation for Advertising Creative Workflow", CHI EA 2024.
- **Tomoyuki Suzuki**, Hirokatsu Kataoka, Yoshimitsu Aoki, Yutaka Satoh, “Anticipating Traffic Accidents with Adaptive Loss and Large-scale Incident DB”, CVPR 2018.
- **Tomoyuki Suzuki**, Takahiro Itazuri, Kensho Hara, Hirokatsu Kataoka, “Learning Spatiotemporal 3D Convolution with Video Order Self-Supervision”, ECCV 2018 workshop on Person In Context.
- **Tomoyuki Suzuki**, Munetaka Minoguchi, Ryota Suzuki, Akio Nakamura, Kenji Iwata, Yutaka Satoh, Hirokatsu Kataoka, “Semantic Change Detection”, ICARCV 2018
- Kaori Abe, Munetaka Minoguchi, Teppei Suzuki, **Tomoyuki Suzuki**, Naofumi Akimoto, Yue Qiu, Ryota Suzuki, Kenji Iwata, Yutaka Satoh, Hirokatsu Kataoka, “Fashion Culture Database: Construction of Database for World-wide Fashion Analysis”, ICARCV 2018.

Journal

- **Tomoyuki Suzuki**, Yoshimitsu Aoki, “RetinaViT: Efficient Visual Backbone for Online Video Streams”, Sensors, 24 (17), 2024.
- **Tomoyuki Suzuki**, Yoshimitsu Aoki, “Efficient Transformer-Based Compressed Video Modeling via Informative Patch Selection”, Sensors, 23 (1), 2022.
- **Tomoyuki Suzuki**, Yoshimitsu Aoki, “Time-sequential action recognition using pose-centric learning for action-transition videos”, Journal of the Japan Society for Precision Engineering, 83 (12), 2017.

AWARDS

Best Overseas Team Awards on ACM MM 2021 Grand Challenge

2021

Praised for the best score among all the overseas teams in ACM MM 2021 Grand Challenge “[Tencent Advertisement Algorithm Competition](#)”.

ADDITIONALS

- Kaggle Expert
- Please refer to [HomePage](#) for other presentations, articles, and activities.