Qing YU

Research Scientist, LY Corporation

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yulut.com

EDUCATION

Ph.D.

The University of Tokyo, Japan.

Information and Communication Engineering, Graduate School of Information Science and Technology.

April 2020 - March 2023.

Master of Interdisciplinary Information Studies

The University of Tokyo, Japan.

Emerging design and informatics course, Graduate School of Interdisciplinary Information Studies. April 2018 – March 2020.

Bachelor of Engineering

The University of Tokyo, Japan.

Natural Sciences, College of Arts and Sciences. April 2014 – March 2016.

Information and Communication Engineering, Faculty of Engineering. April 2016 - March 2018.

PUBLICATIONS

International Conferences

Qing Yu, Mikihiro Tanaka and Kent Fujiwara. ReMoGPT: Part-Level Retrieval-Augmented Motion-Language Models. In *AAAI Conference on Artificial Intelligence (AAAI)*, 2025.

Kent Fujiwara, Mikihiro Tanaka and **Qing Yu**. Chronologically Accurate Retrieval for Temporal Grounding of Motion-Language Models. In *European Conference on Computer Vision (ECCV)*, 2024.

Qing Yu, Mikihiro Tanaka and Kent Fujiwara. Exploring Vision Transformers for 3D Human Motion-Language Models with Motion Patches. In *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2024.

Atsuyuki Miyai, **Qing Yu**, Go Irie and Kiyoharu Aizawa. LoCoOp: Few-Shot Out-of-Distribution Detection via Prompt Learning. In *Neural Information Processing Systems (NeurIPS)*, 2023.

Jiafeng Mao, **Qing Yu**, Go Irie and Kiyoharu Aizawa. Noise-Avoidance Sampling for Annotation Missing Object Detection. In *IEEE International Conference on Image Processing (ICIP)*, 2023.

Qing Yu and Kent Fujiwara. Frame-Level Label Refinement for Skeleton-Based Weakly-Supervised Action Recognition. In *AAAI Conference on Artificial Intelligence (AAAI)*, 2023.

Atsuyuki Miyai, **Qing Yu**, Daiki Ikami, Go Irie and Kiyoharu Aizawa. Rethinking Rotation in Self-Supervised Contrastive Learning: Adaptive Positive or Negative Data Augmentation. In *Winter Conference on Applications of Computer Vision (WACV)*, 2023.

Qing Yu, Daiki Ikami, Go Irie and Kiyoharu Aizawa. Self-Labeling Framework for Novel Category Discovery over Domains. In *AAAI Conference on Artificial Intelligence (AAAI)*, 2022.

Jiafeng Mao, **Qing Yu**, Yoko Yamakata and Kiyoharu Aizawa. Noisy Annotation Refinement for Object Detection. In *British Machine Vision Conference (BMVC)*, 2021.

Qing Yu, Atsushi Hashimoto and Yoshitaka Ushiku. Divergence Optimization for Noisy Universal Domain Adaptation. In *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2021.

Qing Yu, Daiki Ikami, Go Irie and Kiyoharu Aizawa. Multi-Task Curriculum Framework for Open-Set Semi-Supervised Learning. In *European Conference on Computer Vision (ECCV)*, 2020.

Qing Yu and Kiyoharu Aizawa. Unknown Class Label Cleaning for Learning with Open-Set Noisy Labels. In *IEEE International Conference on Image Processing (ICIP)*, 2020.

Jiafeng Mao, **Qing Yu** and Kiyoharu Aizawa. Noisy Localization Annotation Refinement For Object Detection. In *IEEE International Conference on Image Processing (ICIP)*, 2020.

Takumi Kawashima, **Qing Yu**, Akari Asai, Daiki Ikami and Kiyoharu Aizawa. The Aleatoric Uncertainty Estimation Using a Separate Formulation with Virtual Residuals. In *International Conference on Pattern Recognition (ICPR)*, 2020.

Qing Yu and Kiyoharu Aizawa. Unsupervised Out-of-Distribution Detection by Maximum Classifier Discrepancy. In *IEEE International Conference on Computer Vision (ICCV)*, 2019.

Qing Yu, Masashi Anzawa, Sosuke Amano, Makoto Ogawa and Kiyoharu Aizawa. Food Image Recognition by Personalized Classifier. In *IEEE International Conference on Image Processing (ICIP)*, 2018.

Journal

Qing Yu, Go Irie and Kiyoharu Aizawa. Open-Set Domain Adaptation with Visual-Language Foundation Models. In *Computer Vision and Image Understanding*, 2024.

Qing Yu, Go Irie and Kiyoharu Aizawa. Self-Labeling Framework for Open-Set Domain Adaptation with Few Labeled Samples. In *IEEE Transactions on Multimedia*, 2023.

Jiafeng Mao, **Qing Yu** and Kiyoharu Aizawa. Noisy Localization Annotation Refinement for Object Detection. In *IEICE Trans. Information and Systems*, 2021.

Qing Yu, Masashi Anzawa, Sosuke Amano and Kiyoharu Aizawa. Personalized Food Image Classifier Considering Time-Dependent and Item-Dependent Food Distribution. In *IEICE Trans. Information and Systems*, 2019.

Preprints

Atsuyuki Miyai, Jingkang Yang, Jingyang Zhang, Yifei Ming, Yueqian Lin, **Qing Yu**, Go Irie, Shafiq Joty, Yixuan Li, Hai Li, Ziwei Liu, Toshihiko Yamasaki, Kiyoharu Aizawa. Generalized Out-of-Distribution Detection and Beyond in Vision Language Model Era: A Survey. In *arXiv*, 2024.

Atsuyuki Miyai, Jingkang Yang, Jingyang Zhang, Yifei Ming, **Qing Yu**, Go Irie, Yixuan Li, Hai Li, Ziwei Liu, Kiyoharu Aizawa. Unsolvable Problem Detection: Evaluating Trustworthiness of Vision Language Models. In *arXiv*, 2024.

Atsuyuki Miyai, **Qing Yu**, Go Irie, Kiyoharu Aizawa Zero-Shot In-Distribution Detection in Multi-Object Settings Using Vision-Language Foundation Models. In *arXiv*, 2023.

INVITED TALKS

Qing Yu. How to participate in an image recognition competition. In *Symposium on Sensing via Image Information (SSII)*, 2020.

Qing Yu. The approach to win an image recognition competition. In *Forum on Information Technology* (*FIT*), 2019.

HONORS AND AWARDS

Academic Awards and Fellowships

ECCV Outstanding Reviewer — October 2022

Outstanding reviewer award in European Conference on Computer Vision (ECCV) 2022.

MIRU Best Student Paper Award — July 2022

Best student paper award in Meeting on Image Recognition and Understanding (MIRU) 2022.

Dean's List - March 2020

Best master thesis in the department, Graduate School of Interdisciplinary Information Studies, The University of Tokyo.

MIRU Best Student Paper Award — August 2019

Best student paper award in Meeting on Image Recognition and Understanding (MIRU) 2019.

Research Fellowships for Young Scientists

A research fellowship program for Ph.D. students provided by Japan Society for the Promotion of Science.

200,000 JPY per month

April 2020 - March 2023

The University of Tokyo Fellowship

A Special scholarship program for international students provided by The University of Tokyo.

200,000 JPY per month

April 2018 - March 2020

Fuji Seal Packaging Education and Scholarship Foundation Scholarship

A Scholarship provided by Fuji Seal International to highly motivated, disciplined and academically talented students.

100,000 JPY per month

April 2016 - March 2018

Others

Reviewer for International Journals and Conferences

CVPR, ICCV, ECCV, NeurIPS, AAAI, IEEE TMM, CVIU.

Kaggle Competition Master (https://www.kaggle.com/angelecarre)

One solo gold medal and five silver medals.

SIGNATE Competition Grandmaster (https://signate.jp/users/10776/history)

A Japanese website offering data science competitions.

Three championships.

The Champion of Data Science Challenge by FUJIFILM AI Academy Brain(s) - July 2019

An OCR competition.

Prize: X Series FUJIFILM X100F

The Champion of The 1st Tellus Satellite Challenge — December 2018

A landslide detection competition.

Prize: 1,000,000 JPY

The Champion of AIST Satellite Image Analysis Contest — April 2018

A golf course detection competition.

Prize: 300,000 JPY

The Champion of 2018 The Japanese Society for Artificial Intelligence Data Analysis Competition (JSAI Cup 2018) — March 2018

A food ingredient image classification competition.

Prize: 500.000 JPY

RESEARCH AND PROFESSIONAL EXPERIENCE

Virtual Human Lab, LY Corp. (formerly LINE) — April 2023-Present

Research Scientist

Worked on motion recognition and generation.

Aizawa Lab, The University of Tokyo — April 2018-March 2023

Graduate Student

Working on out-of-distribution detection, open-set recognition and domain adaptation.

Image Recognition Group, pluszero Inc. — May 2016-March 2023

Programmer

Application development. Main job includes designing algorithms and coding.

CV Lab, LINE — December 2021-May 2022

Research Intern

Working on action recognition.

Perception group, OMRON SINIC X — July 2019-December 2019, August 2020-September 2021

Research Intern

Worked on domain adaptation in the wild.

Learn.AI, The University of Tokyo — April 2018-March 2020

Teaching Assistant

An open course at UTokyo which offers the basics of CS and AI including deep learning.

Rinna Team, Microsoft Development — August 2018-September 2018

Software Engineer Intern

Worked on Rinna feature development.

Aizawa Yamasaki Lab, The University of Tokyo — April 2017-March 2018

Undergraduate Student

Worked on personalized classifier for food image recognition which incrementally learns the user's data and adapts to the user's eating habit.

Princeton University – The University of Tokyo Strategic Partnership Summer Undergraduate Student Exchange — August 2016

Researcher

A program totally supported and sponsored by The University of Tokyo and Princeton University. One-month exchange program in the Electrical Engineering Department.

SKILLS

Programming Languages: Python, C++.

Deep Learning Frameworks: PyTorch, Tensorflow.

Chinese Proficiency: Native

Japanese Proficiency: Japanese-Language Proficiency Test N1.

English Proficiency: TOEFL iBT 106.