Yusuke Matsui

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Research Interests

Computer vision, data structure, and machine Learning.

Education

2013–2016	**PhD, Information Science and Technology**, *The University of Tokyo, Japan* Advisor: Prof. Kiyoharu Aizawa Thesis: Retrieval and Drawing Assistance for Manga
2011–2013	**MA, Interdisciplinary Information Studies**, *The University of Tokyo, Japan*
2007–2011	**BE, Information and Communication Engineering**, *The University of Tokyo, Japan*

Research and Work Experience

2020–Present	**Lecturer (Senior Assistant Professor)**, *Department of Information and Communication Engineering, Graduate School of Information Science and Technology, The University of Tokyo, Japan*
2019–2020	**Assistant Professor**, *Institute of Industrial Science, The University of Tokyo, Japan* at Prof. Yoichi Sato's Lab
2016–2018	**Postdoctoral Researcher**, *National Institute of Informatics, Japan* at Prof. Shin'ichi Satoh's Lab
Spring 2016	**Visiting Student**, *Columbia University, New York, NY, USA* Mentor: Prof. Shih-Fu Chang
Summer 2014	**Research Intern**, *Microsoft Research, Redmond, WA, USA* Mentor: Dr. Yinpeng Chen
Summer 2013	**Research Intern**, *Microsoft Research Asia, Beijing, China* Mentor: Dr. Takaaki Shiratori

Journal Publications

[1] <u>Yusuke Matsui</u>, Misaki Ohashi, "Unbiased Scene Graph Generation Using Predicate Similarities", IEEE Access, 2024.

[2] <u>Yusuke Matsui</u>, Toshihiko Yamasaki, Kiyoharu Aizawa, "PQTable: Nonexhaustive Fast Search for Product-Quantized Codes Using Hash Tables", IEEE Transactions on Multimedia, (TMM), 2018.

[3] <u>Yusuke Matsui</u>, Yusuke Uchida, Hervé Jégou, Shin'ichi Satoh, "A Survey of Product Quantization", ITE Transactions on Media Technology and Applications, (ITE), 2018.

[4] <u>Yusuke Matsui</u>, Takaaki Shiratori, Kiyoharu Aizawa, "DrawFromDrawings: 2D Drawing Assistance via Stroke Interpolation with a Sketch Database", IEEE Transactions on Visualization and Computer Graphics, (TVCG), 2017.

[5] <u>Yusuke Matsui</u>, Kota Ito, Yuji Aramaki, Azuma Fujimoto, Toru Ogawa, Toshihiko Yamasaki, Kiyoharu Aizawa, "Sketch-based Manga Retrieval using Manga109 Dataset", Multimedia Tools and Applications, (MTAP), 2017.

[6] Atsuki Sato, <u>Yusuke Matsui</u>, "PCF Learned Sort: a Learning Augmented Sort Algorithm with $O(n \log \log n)$ Expected Complexity", Transactions on Machine Learning Research, (TMLR), Featured Certification, 2025.

[7] Hiroyuki Deguchi, Taro Watanabe, <u>Yusuke Matsui</u>, Masao Utiyama, Hideki Tanaka, Eiichiro Sumita, "Subset Retrieval Nearest Neighbor Machine Translation", Journal of Natural Language Processing, 2024.

[8] Andreu Girbau, Tetsuro Kobayashi, Benjamin Renoust, <u>Yusuke Matsui</u>, Shin'ichi Satoh, "Face Detection, Tracking, and Classification from Large-Scale News Archives for Analysis of Key Political Figures", Political Analysis, 2024.

[9] Kiyoharu Aizawa, Azuma Fujimoto, Atsushi Otsubo, Toru Ogawa, <u>Yusuke Matsui</u>, Koki Tsubota, Hikaru Ikuta, "Building a Manga Dataset "Manga109" with Annotations for Multimedia Applications", IEEE MultiMedia, 2020.

Conference Publications

[1] <u>Yusuke Matsui</u>, "LotusFilter: Fast Diverse Nearest Neighbor Search via a Learned Cutoff Table", Conference on Computer Vision and Pattern Recognition, (CVPR), 2025.

[2] <u>Yusuke Matsui</u>, Yoshiki Imaizumi, Naoya Miyamoto, Naoki Yoshifuji, "ARM 4-bit PQ: SIMD-based Acceleration for Approximate Nearest Neighbor Search on ARM", International Conference on Acoustics, Speech, and Signal Processing, (ICASSP), 2022.

[3] <u>Yusuke Matsui</u>, Ryota Hinami, Shin'ichi Satoh, "Reconfigurable Inverted Index", ACM International Conference on Multimedia, (ACMMM), Oral, 2018.

[4] <u>Yusuke Matsui</u>, Shin'ichi Satoh, "Revisiting Column-Wise Vector Quantization for Memory-Efficient Matrix Multiplication", IEEE International Conference on Image Processing, (ICIP), 2018.

[5] <u>Yusuke Matsui</u>, Keisuke Ogaki, Toshihiko Yamasaki, Kiyoharu Aizawa, "PQk-means: Billion-scale Clustering for Product-quantized Codes", ACM International Conference on Multimedia, (ACMMM), 2017.

[6] <u>Yusuke Matsui</u>, "Challenge for Manga Processing: Sketch-based Manga Retrieval", ACM International Conference on Multimedia, (ACMMM), Doctoral Symposium, 2015.

[7] <u>Yusuke Matsui</u>, Toshihiko Yamasaki, Kiyoharu Aizawa, "PQTable: Fast Exact Asymmetric Distance Neighbor Search for Product Quantization using Hash Tables", IEEE International Conference on Computer Vision, (ICCV), 2015.

[8] <u>Yusuke Matsui</u>, Kiyoharu Aizawa, Yushi Jing, "Sketch2Manga: Sketch-based Manga Retrieval", IEEE International Conference on Image Processing, (ICIP), 2014.

[9] <u>Yusuke Matsui</u>, Toshihiko Yamasaki, Kiyoharu Aizawa, "Interactive Manga Retargeting", ACM SIGGRAPH, Poster, 2011.

[10] Fuma Hidaka, <u>Yusuke Matsui</u>, "Steiner Traversal Initialization: Optimizing the Initial Curve for Geometric Flow-based Surface Filling", ACM SIGGRAPH Asia, Technical Communications, 2025.

[11] Yingxuan Li, Jiafeng Mao, <u>Yusuke Matsui</u>, "Noisy Label Refinement with Semantically Reliable Synthetic Images", IEEE International Conference on Image Processing, (ICIP), 2025.

[12] Björn Kremser, <u>Yusuke Matsui</u>, "RouteExtract: A Modular Pipeline for Extracting Routes from Paper Maps", International Conference on Computer Vision, Workshop on Graphic Design Understanding and Generation, (ICCV WS (GDUG)), 2025.

[13] Kyosuke Nishishita, Atsuki Sato, <u>Yusuke Matsui</u>, "Optimized Learned Count-Min Sketch", Neural Information Processing Systems, Workshop on ML for Systems, (NeurIPS WS (MLforSys)), 2025.

[14] Tomohiro Yamashita, Daichi Amagata, <u>Yusuke Matsui</u>, "How Should We Evaluate Data Deletion in Graph-Based ANN Indexes?", Neural Information Processing Systems, Workshop on ML for Systems, (NeurIPS WS (MLforSys)), 2025.

[15] Yingxuan Li, Ryota Hinami, Kiyoharu Aizawa, <u>Yusuke Matsui</u>, "Zero-Shot Character Identification and Speaker Prediction in Comics via Iterative Multimodal Fusion", ACM International Conference on Multimedia, (ACMMM), Oral, 2024.

[16] Kunato Nishina, <u>Yusuke Matsui</u>, "SVGEditBench: A Benchmark Dataset for Quantitative Assessment of LLM's SVG Editing Capabilities ", Computer Vision and Pattern Recognition Conference, Workshop on Graphic Design Understanding and Generation, (CVPR WS (GDUG)), Extended Abstract, 2024.

[17] Hiroki Azuma, <u>Yusuke Matsui</u>, Atsuto Maki, "ZoDi: Zero-Shot Domain Adaptation with Diffusion-Based Image Transfer", European Conference on Computer Vision, Workshop on Out Of Distribution Generalization in Computer Vision , (ECCV WS (OOD-CV)), 2024.

[18] Takuto Onikubo, <u>Yusuke Matsui</u>, "High-Frequency Anti-DreamBooth: Robust Defense against Personalized Image Synthesis", European Conference on Computer Vision, Workshop on The Dark Side of Generative AIs and Beyond, (ECCV WS (Dark Side of GenAI and Beyond)), Oral, 2024.

[19] Ryoya Nara, Yu-Chieh Lin, Yuji Nozawa, Youyang Ng, Goh Itoh, Osamu Torii, <u>Yusuke Matsui</u>, "Revisiting Relevance Feedback for CLIP-based Interactive Image Retrieval", European Conference on Computer Vision, Workshop on Traditional Computer Vision in the Age of Deep Learning , (ECCV WS (TradiCV)), Oral, 2024.

[20] Yingxuan Li, Kiyoharu Aizawa, <u>Yusuke Matsui</u>, "Manga109Dialog: A Large-scale Dialogue Dataset for Comics Speaker Detection", IEEE International Conference on Multimedia and Expo, (ICME), 2024.

[21] Jeonghun Baek, <u>Yusuke Matsui</u>, Kiyoharu Aizawa, "Cross-Lingual Learning in Multilingual Scene Text Recognition", International Conference on Acoustics, Speech and Signal Processing, (ICASSP), 2024.

[22] Fuma Hidaka, <u>Yusuke Matsui</u>, "FlexFlood: Efficiently Updatable Learned Multi-dimensional Index", Neural Information Processing Systems, Workshop on ML for Systems, (NeurIPS WS (MLforSys)), 2024.

[23] Naoki Ono, <u>Yusuke Matsui</u>, "Relative NN-Descent: A Fast Index Construction for Graph-Based Approximate Nearest Neighbor Search", ACM International Conference on Multimedia, (ACMMM), 2023.

[24] Hiroyuki Deguchi, Taro Watanabe, <u>Yusuke Matsui</u>, Masao Utiyama, Hideki Tanaka, Eiichiro Sumita, "Subset Retrieval Nearest Neighbor Machine Translation", Association for Computational Linguistics, (ACL), 2023.

[25] Jeonghun Baek, Eunchung Noh, <u>Yusuke Matsui</u>, Kiyoharu Aizawa, "Character Image Combination for Multilingual Scene Text Recognition: Can We Make High-Performance Synthetic Data Without Fonts?", International Conference on Computer Vision, Workshop Towards the Next Generation of Computer Vision Datasets, (ICCV WS (TNGCV)), 2023.

[26] Hiroki Azuma, <u>Yusuke Matsui</u>, "Defense-Prefix for Preventing Typographic Attacks on CLIP", International Conference on Computer Vision, Workshop on Adversarial Robustness In the Real World, (ICCV WS (AROW)), Best Paper Award, 2023.

[27] Yutaro Oguri, <u>Yusuke Matsui</u>, "General and Practical Tuning Method for Off-the-Shelf Graph-Based Index", International Conference on Similarity Search and Applications, (SISAP), Indexing Challenge Report by Team Utokyo, 2023.

[28] Atsuki Sato, <u>Yusuke Matsui</u>, "Fast Partitioned Learned Bloom Filter", Neural Information Processing Systems, (NeurIPS), 2023.

[29] Jeonghun Baek, <u>Yusuke Matsui</u>, Kiyoharu Aizawa, "COO: Comic Onomatopoeia Dataset for Recognizing Arbitrary or Truncated Texts", European Conference on Computer Vision, (ECCV), 2022.

[30] Keita Awane, Daichi Horita, Hikaru Ikuta, <u>Yusuke Matsui</u>, Kiyoharu Aizawa, Naohiro Yanase, "Translation of Illustration Artist Style using Sailormoonredraw Data", IEEE International Conference on Image Processing, (ICIP), 2022.

[31] Hikaru Ikuta, Runtian Yu, <u>Yusuke Matsui</u>, Kiyoharu Aizawa, "Towards Content-Aware Pixel-Wise Comic Panel Segmentation", International Workshop on Comics Analysis, Processing and Understanding, (MANPU), 2022.

[32] Ryota Hinami, Shonosuke Ishiwatari, Kazuhiko Yasuda, <u>Yusuke Matsui</u>, "Towards Fully Automated Manga Translation", AAAI Conference on Artificial Intelligence, (AAAI), 2021.

[33] Naoki Ono, Kiyoharu Aizawa, <u>Yusuke Matsui</u>, "Comic Image Inpainting via Distance Transform", ACM SIGGRAPH Asia, Technical Communications, 2021.

[34] Yoichiro Hisadome, <u>Yusuke Matsui</u>, "Cascading Feature Extraction for Fast Point Cloud Registration", British Machine Vision Conference, (BMVC), 2021.

[35] Jeonghun Baek, <u>Yusuke Matsui</u>, Kiyoharu Aizawa, "What If We Only Use Real Datasets for Scene Text Recognition? Toward Scene Text Recognition With Fewer Labels", Conference on Computer Vision and Pattern Recognition, (CVPR), 2021.

[36] Keita Awane, Koki Tsubota, Hikaru Ikuta, <u>Yusuke Matsui</u>, Kiyoharu Aizawa, Naohiro Yanase, "Improving the Quality of Illustrations: Transforming Amateur Illustrations to a Professional Standard", IEEE International Conference on Image Processing, (ICIP), 2021.

[37] Kimihiro Tanaka, <u>Yusuke Matsui</u>, Shin'ichi Satoh, "Efficient Nearest Neighbor Search by Removing Anti-hub", International Conference on Multimedia Retrieval, (ICMR), 2021.

[38] Fan Yang, Ryota Hinami, <u>Yusuke Matsui</u>, Steven Ly, Shin'ichi Satoh, "Efficient Image Retrieval via Decoupling Diffusion into Online and Offline Processing", AAAI Conference on Artificial Intelligence, (AAAI), 2019.

[39] Haolin Ren, Fan Yang, Benjamin Renoust, <u>Yusuke Matsui</u>, Tetsuro Kobayashi, Shin'ichi Satoh, "Evaluating Face Tracking for Political Analysis in Japanese News Over a Long Period of Time", IEEE/WIC/ACM International Conference on Web Intelligence, (WI), 2019.

[40] Ryota Hinami, <u>Yusuke Matsui</u>, Shin'ichi Satoh, "Region-based Image Retrieval Revisited", ACM International Conference on Multimedia, (ACMMM), Oral, 2017.

[41] Junfu Pu, <u>Yusuke Matsui</u>, Fan Yang, Shin'ichi Satoh, "Energy based Fast Event Retrieval in Video with Temporal Match Kernel", IEEE International Conference on Image Processing, (ICIP), 2017.

[42] Chairath Sirirattanapol, <u>Yusuke Matsui</u>, Shin'ichi Satoh, Kuninori Matsuda, Kazuaki Yamamoto, "Deep Image Retrieval Applied on Kotenseki Ancient Japanese Literature", IEEE International Workshop on Machine Learning and Computing for Visual Semantic Analysis, (MLCSA), 2017.

[43] Yuji Aramaki, <u>Yusuke Matsui</u>, Toshihiko Yamasaki, Kiyoharu Aizawa, "Text Detection in Manga by Combining Connected-omponent-based and Region-based Classifications", IEEE International Conference on Image Processing, (ICIP), 2016.

[44] Toru Ogawa, <u>Yusuke Matsui</u>, Toshihiko Yamasaki, Kiyoharu Aizawa, "Sketch Simplification by Classifying Strokes", International Conference on Pattern Recognition, (ICPR), 2016.

[45] Kota Ito, <u>Yusuke Matsui</u>, Toshihiko Yamasaki, Kiyoharu Aizawa, "Interactive Region Segmentation for Manga", International Conference on Pattern Recognition, (ICPR), 2016.

[46] Azuma Fujimoto, Toru Ogawa, Kazuyoshi Yamamoto, <u>Yusuke Matsui</u>, Toshihiko Yamasaki, Kiyoharu Aizawa, "Manga109 Dataset and Creation of Metadata", International Workshop on Comics Analysis, Processing and Understanding, (MANPU), 2016.

[47] Masaki Saito, <u>Yusuke Matsui</u>, "Illustration2vec: A Semantic Vector Representation of Illustrations", ACM SIGGRAPH Asia, Technical Brief, 2015.

[48] Yuji Aramaki, <u>Yusuke Matsui</u>, Toshihiko Yamasaki, Kiyoharu Aizawa, "Interactive Segmentation for Manga using Lossless Thinning and Coarse Labeling", APSIPA ASC, 2015.

[49] Kota Ito, <u>Yusuke Matsui</u>, Toshihiko Yamasaki, Kiyoharu Aizawa, "Separation of Manga Line Drawings and Screentones", Eurographics, Short Paper, 2015.

[50] Yuji Aramaki, <u>Yusuke Matsui</u>, Toshihiko Yamasaki, Kiyoharu Aizawa, "Interactive Segmentation for Manga", ACM SIGGRAPH, Poster, 2014.

[51] Daiki Matsumoto, <u>Yusuke Matsui</u>, Toshihiko Yamasaki, Kiyoharu Aizawa, Takanori Katagiri, "IllustStyleMap: Visualization of Illustrations based on Similarity of Drawing Style of Authors", ACM SIGGRAPH, Poster, 2014.

[52] Kazuhiro Sato, <u>Yusuke Matsui</u>, Toshihiko Yamasaki, Kiyoharu Aizawa, "Reference based Manga Colorization by Graph Correspondence Using Quadratic Programming", ACM SIGGRAPH Asia, Technical Brief, 2014.

[53] Saemi Choi, <u>Yusuke Matsui</u>, Kiyoharu Aizawa, "Diffusion : Change an Ambience of the Space with a Small Amount of Ink", ACM SIGGRAPH Asia, Poster, 2014.

Technical Reports

[1] Atsuki Sato, <u>Yusuke Matsui</u>, "Cascaded Learned Bloom Filter for Optimal Model-Filter Size Balance and Fast Rejection", arXiv, 2025.

[2] Kunato Nishina, <u>Yusuke Matsui</u>, "SVGEditBench V2: A Benchmark for Instruction-based SVG Editing", arXiv, 2025.

[3] <u>Yusuke Matsui</u>, "LotusFilter: Fast Diverse Nearest Neighbor Search via a Learned Cutoff Table", arXiv, 2025.

[4] Yutaro Oguri, <u>Yusuke Matsui</u>, "Theoretical and Empirical Analysis of Adaptive Entry Point Selection for Graph-based Approximate Nearest Neighbor Search", arXiv, 2024.

[5] Hiroki Azuma, <u>Yusuke Matsui</u>, Atsuto Maki, "ZoDi: Zero-Shot Domain Adaptation with Diffusion-Based Image Transfer", arXiv, 2024.

[6] Kunato Nishina, <u>Yusuke Matsui</u>, "SVGEditBench: A Benchmark Dataset for Quantitative Assessment of LLM's SVG Editing Capabilities", arXiv, 2024.

[7] Yingxuan Li, Ryota Hinami, Kiyoharu Aizawa, <u>Yusuke Matsui</u>, "Zero-Shot Character Identification and Speaker Prediction in Comics via Iterative Multimodal Fusion", arXiv, 2024.

[8] Ryoya Nara, Yu-Chieh Lin, Yuji Nozawa, Youyang Ng, Goh Itoh, Osamu Torii, <u>Yusuke Matsui</u>, "Revisiting Relevance Feedback for CLIP-based Interactive Image Retrieval", arXiv, 2024.

[9] Atsuki Sato, <u>Yusuke Matsui</u>, "PCF Learned Sort: a Learning Augmented Sort Algorithm with $O(n \log \log n)$ Expected Complexity", arXiv, 2024.

[10] Takuto Onikubo, <u>Yusuke Matsui</u>, "High-Frequency Anti-DreamBooth: Robust Defense against Personalized Image Synthesis", arXiv, 2024.

[11] <u>Yusuke Matsui</u>, Tatsuya Yokota, "Broadcast Product: Shape-aligned Element-wise Multiplication and Beyond", arXiv, 2024.

[12] Atsuki Sato, <u>Yusuke Matsui</u>, "Fast Construction of Partitioned Learned Bloom Filter with Theoretical Guarantees ", arXiv, 2024.

[13] Fuma Hidaka, <u>Yusuke Matsui</u>, "FlexFlood: Efficiently Updatable Learned Multi-dimensional Index", arXiv, 2024.

[14] Hiroki Azuma, <u>Yusuke Matsui</u>, "Defense-Prefix for Preventing Typographic Attacks on CLIP", arXiv, 2023.

[15] Atsuki Sato, <u>Yusuke Matsui</u>, "Fast Partitioned Learned Bloom Filter", arXiv, 2023.

[16] Yutaro Oguri, <u>Yusuke Matsui</u>, "General and Practical Tuning Method for Off-the-Shelf Graph-Based Index: SISAP Indexing Challenge Report by Team Utokyo", arXiv, 2023.

[17] Yingxuan Li, Kiyoharu Aizawa, <u>Yusuke Matsui</u>, "Manga109Dialog A Large-scale Dialogue Dataset for Comics Speaker Detection", arXiv, 2023.

[18] Naoki Ono, <u>Yusuke Matsui</u>, "Relative NN-Descent: A Fast Index Construction for Graph-Based Approximate Nearest Neighbor Search", arXiv, 2023.

[19] Ryoya Nara, Yusuke Matsui, "Adversarial Doodles: Interpretable and Human-drawable Attacks Provide Describable Insights", arXiv, 2023.

[20] Yusuke Matsui, Yoshiki Imaizumi, Naoya Miyamoto, Naoki Yoshifuji, "ARM 4-bit PQ: SIMD-based Acceleration for Approximate Nearest Neighbor Search on ARM", arXiv, 2022.

[21] Misaki Ohashi, Yusuke Matsui, "Unbiased Scene Graph Generation using Predicate Similarities", arXiv, 2022.

[22] Yasunori Kudo, Keisuke Ogaki, Yusuke Matsui, Yuri Odagiri, "Unsupervised Adversarial Learning of 3D Human Pose from 2D Joint Locations", arXiv, 2018.

[23] Toru Ogawa, Atsushi Otsubo, Rei Narita, Yusuke Matsui, Toshihiko Yamasaki, Kiyoharu Aizawa, "Object Detection for Comics using Manga109 Annotations", arXiv, 2018.

[24] Yusuke Matsui, Toshihiko Yamasaki, Kiyoharu Aizawa, "PQTable: Non-exhaustive Fast Search for Product-quantized Codes using Hash Tables", arXiv, 2017.

[25] Yusuke Matsui, Keisuke Ogaki, Kiyoharu Aizawa, Toshihiko Yamasaki, "PQk-means: Billion-scale Clustering for Product-quantized Codes", arXiv, 2017.

[26] Yusuke Matsui, Kota Ito, Yuji Aramaki, Toshihiko Yamasaki, Kiyoharu Aizawa, "Sketch-based Manga Retrieval using Manga109 Dataset", arXiv, 2015.

Awards (by myself and my students)

2024 **Best Teaching Award**, *Faculty of Engineering, The University of Tokyo*, Yusuke Matsui

2024 **Outstanding Reviewer**, *CVPR*, Yusuke Matsui

2023 **Outstanding Reviewer**, *CVPR*, Yusuke Matsui

2023 **Best Paper Award**, *ICCV AROW WS*, Hiroki Azuma, Yusuke Matsui

2023 **2nd Place**, *SISAP Index Challenge, Task A*, Yutaro Oguri, Yusuke Matsui

2022 **Outstanding Reviewer**, *ICMR*, Yusuke Matsui

2022 **Outstanding Reviewer**, *ACCV*, Yusuke Matsui

2021 **Outstanding Reviewer**, *CVPR*, Yusuke Matsui

2021 **Outstanding Reviewer**, *ICCV*, Yusuke Matsui

2018 **Outstanding Reviewer Award**, *ACM ICMR*, Yusuke Matsui

2018 **7th place**, *Google Landmark Retrieval Challenge*, Aimin Su, Steven Ly, Fan Yang, Ryota Hinami, Qier Meng, Sang Phan, Yusuke Matsui, Zheng Wang, Shin'ichi Satoh

2018 **7th place**, *Google Landmark Recognition Challenge*, Aimin Su, Steven Ly, Fan Yang, Ryota Hinami, Qier Meng, Sang Phan, Yusuke Matsui, Zheng Wang, Shin'ichi Satoh

2018 **Funai Research Award**, *Funai Foundation for Information Technology*, Yusuke Matsui

2016 **Dean's Award**, *Graduate School of Information Science and Technology, The University of Tokyo*, Yusuke Matsui

2013 **Dean's Award**, *Graduate School of Interdisciplinary Information Studies, The University of Tokyo*, Yusuke Matsui

2011 **ACM Student Research Competition 3rd Place**, *ACM SIGGRAPH*, Yusuke Matsui

2011 **Dean's Award**, *Faculty of Engineering, The University of Tokyo*, Yusuke Matsui

Invited Talks

2025 **Where Learned Data Structures Meet Computer Vision**, *ACMMM Workshop of MMGR, Keynote*, Yusuke Matsui

2025 **Where Learned Data Structures Meet Computer Vision**, *SNL*, Yusuke Matsui

2024 **Advanced Data Structure for Vector DB**, *The 2nd Japan-Korea Workshop on Artificial Intelligence*, Yusuke Matsui

2024 **Broadcast Product**, *The 1st East Asian Computer Vision Workshop*, <u>Yusuke Matsui</u>

2023 **The Theory behind Vector DB**, *The 1st Japan-Korea Workshop on Artificial Intelligence*, <u>Yusuke Matsui</u>

2018 **Manga109 and Beyond: Recent Advancement in Comic Image Processing**, *Naver*, <u>Yusuke Matsui</u>

2018 **Sketch-based Manga Retrieval**, *Handai IDS-JFLI joint Workshop on Media and Graphics*, <u>Yusuke Matsui</u>

2017 **Sketch-Based Image Retrieval And Data-Driven Drawing Assistance**, *Vietnam-Japan Scientific Exchange Meeting (VJSE)*, <u>Yusuke Matsui</u>

▄▄▄▄ Tutorials

2024 **Theory and Applications of Graph-based Nearest Neighbor Search**, *VCIP 2024*, <u>Yusuke Matsui</u>

2023 **Neural Search in Action**, *CVPR 2023 Tutorial*, <u>Yusuke Matsui</u>, Martin Aumüller, Han Xiao

2020 **Effective and Efficient: Toward Open-world Instance Re-identification**, *ACMMM 2020 Tutorial*, Zheng Wang, Wu Liu, <u>Yusuke Matsui</u>, Shin'ichi Satoh

2020 **Image Retrieval in the Wild**, *CVPR 2020 Tutorial*, <u>Yusuke Matsui</u>, Takuma Yamaguchi, Zheng Wang

▄▄▄▄ Professional Activities/Service

2025 **Area Chair**, *ICCV*

2025 **Registration Chair**, *MMM*

2024 **Area Chair**, *ACCV*

2023 **Editorial Board**, *IJMIR*

2023 **Senior Program Committee**, *IJCAI*

2022 **Local Chair**, *ACM Multimedia Asia*

2019 **Local Chair**, *IEEE International Conference on Computational Photography*

2019 **Organizer**, *Multi-Discipline Approach for Learning Concepts - Zero-Shot, One-Shot, Few- Shot and Beyond (ICCV Workshop)*

2018 **General Chair**, *International Workshop on coMics ANalysis, Processing and Understanding*

2018 **Publication Chair**, *ACM International Conference on Multimedia Retrieval*

2017 **Program Chair**, *International Workshop on coMics ANalysis, Processing and Understanding*