

Dr. Marc A. Kastner

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Professional work experience

- 2020– **Postdoctoral researcher**, *National Institute of Informatics, Digital Content and Media Sciences*, Tokyo, Japan
- 2020– **Visiting researcher**, *Nagoya University, Contents Science Laboratory*, Nagoya, Japan

Education

- 2017–2020 **Ph.D.**, *Nagoya University, Japan*, Major, Informatics
- 2019–2019 **Internship student**, *National Institute of Informatics, Digital Content and Media Sciences*
- 2016–2017 **Research student**, *Nagoya University, Japan*, Information Science
- 2014–2016 **M.Sc.**, *TU Braunschweig, Germany*, Informatics
- 2013–2014 **Exchange student**, *Nagoya University, Japan*, NUPACE
- 2010–2014 **B.Sc.**, *TU Braunschweig, Germany*, Informatics

Selected publications

Journal

- [1] M. A. Kastner, I. Ide, F. Nack, Y. Kawanishi, T. Hirayama, D. Deguchi, and H. Murase, “Estimating the imageability of words by mining visual characteristics from crawled image data,” *Multimed. Tools Appl.*, vol. 79, pp. 18167–18199, July 2020.
- [2] M. A. Kastner, I. Ide, Y. Kawanishi, T. Hirayama, D. Deguchi, and H. Murase, “Estimating the visual variety of concepts by referring to Web popularity,” *Multimed. Tools Appl.*, vol. 78, pp. 9463–9488, April 2019.

International conference

- [3] M. A. Kastner, C. Matsuhira, I. Ide, and S. Satoh, “A multi-modal dataset for analyzing the imageability of concepts across modalities,” in

4th IEEE International Conference on Multimedia Information Processing and Retrieval (MIPR2021), To be published in September 2021.

- [4] C. Matsuhira, M. A. Kastner, I. Ide, Y. Kawanishi, T. Hirayama, K. Doman, D. Deguchi, and H. Murase, “Pointedness of an image: Measuring how pointy an image is perceived,” in *HCI International 2021 - Posters* (C. Stephanidis, M. Antona, and S. Ntoa, eds.), (Cham), pp. 137–144, Springer International Publishing, 2021.
 - [5] K. Umemura, M. A. Kastner, I. Ide, Y. Kawanishi, T. Hirayama, K. Doman, D. Deguchi, and H. Murase, “Tell as you imagine: Sentence imageability-aware image captioning,” in *MultiMedia Modeling* (J. Lokoč, T. Skopal, K. Schoeffmann, V. Mezaris, X. Li, S. Vrochidis, and I. Patras, eds.), (Cham), pp. 62–73, Springer International Publishing, 2021.
 - [6] S. Sadegharmaki, M. A. Kastner, and S. Satoh, “Fashiongraph: Understanding fashion data using scene graph generation,” in *2020 25th International Conference on Pattern Recognition (ICPR)*, pp. 7923–7929, 2021.
 - [7] C. Matsuhira, M. A. Kastner, I. Ide, Y. Kawanishi, T. Hirayama, K. Doman, D. Deguchi, and H. Murase, “Imageability estimation using visual and language features,” in *Proceedings of the 2020 International Conference on Multimedia Retrieval*, p. 306–310, Association for Computing Machinery, June 2020.
 - [8] M. A. Kastner, I. Ide, Y. Kawanishi, T. Hirayama, D. Deguchi, and H. Murase, “Browsing visual sentiment datasets using psycholinguistic groundings,” in *Advances in Multimedia Modeling: 26th Int. Conf. on Multimedia Modeling Procs.*, vol. 11962 of *Lecture Notes in Computer Science*, pp. 697–702, Springer, January 2020.
 - [9] M. A. Kastner, “On quantizing the mental image of concepts for visual semantic analyses,” in *Proc. 27th ACM Int. Conf. on Multimedia*, pp. 1660–1664, October 2019.
- Japanese domestic symposium**
- [10] 松平茅隼, カストナーマークアウレル, 井手一郎, 川西康友, 平山高嗣, 道満恵介, 出口大輔, and 村瀬洋, “俯瞰支援のための文書彩色方法の検討—単語から連想される色に基づく文書内容の可視化—,” *電子情報通信学会技術研究報告 = IEICE technical report : 信学技報*, vol. 120, pp. 35–37, September 2020.
 - [11] M. A. Kastner and S. Satoh, “On modelling viewer sentiment of social media videos for attractive computing,” *電子情報通信学会技術研究報告 = IEICE technical report : 信学技報*, vol. 120, pp. 21–26, September 2020.

- [12] 梅村和紀, カストナーマークアウレル, 井手一郎, 川西康友, 平山高嗣, 道満恵介, 出口大輔, and 村瀬洋, “心像性を考慮した画像キャプションの検討,” in *Proc. 23rd Meeting on Image Recognition and Understanding, Japan*, August 2020.
- [13] M. A. Kastner and S. Satoh, “A preliminary study on viewer sentiment analysis of social media videos,” in *Proc. 23rd Meeting on Image Recognition and Understanding, Japan*, no. IS3-2-2 in Poster session, August 2020.
- [14] M. A. Kastner, I. Ide, Y. Kawanishi, T. Hirayama, D. Deguchi, and H. Murase, “On visualizing psycholinguistic groundings for sentiment image datasets,” in *Proc. 22nd Meeting on Image Recognition and Understanding, Japan*, no. DS-3 in Demo session, August 2019.
- [15] M. A. Kastner, I. Ide, Y. Kawanishi, T. Hirayama, D. Deguchi, and H. Murase, “On the quantification of the mental image of visual concepts for multi-modal applications,” Tech. Rep. 5, 情報処理学会研究報告, May 2020.
- [16] 松平茅隼, カストナーマークアウレル, 井手一郎, 川西康友, 平山高嗣, 道満恵介, 出口大輔, and 村瀬洋, “視覚特徴と言語特徴を用いた単語の心像性推定の検討,” 言語処理学会 第26回年次大会発表論文集, pp. 45–48, March 2020.
- [17] 梅村和紀, カストナーマークアウレル, 井手一郎, 川西康友, 平山高嗣, 道満恵介, 出口大輔, and 村瀬洋, “心像性に基づく画像キャプションの検討,” 電子情報通信学会技術研究報告 = *IEICE technical report*: 信学技報, vol. 119, pp. 165–169, March 2020.
- [18] M. A. Kastner, I. Ide, Y. Kawanishi, T. Hirayama, D. Deguchi, and H. Murase, “A preliminary study on estimating word imageability labels using Web image data mining,” in *Proc. 25th Annual Meeting of The Association for Natural Language Processing, Japan*, pp. 747–750, March 2019.
- [19] 梅村和紀, カストナーマークアウレル, 井手一郎, 川西康友, 平山高嗣, 道満恵介, 出口大輔, and 村瀬洋, “画像キャプションの質的評価に向けた文の心像性推定手法の検討,” 言語処理学会 第25回年次大会発表論文集, pp. 755–758, March 2019.
- [20] M. A. Kastner, I. Ide, Y. Kawanishi, T. Hirayama, D. Deguchi, and H. Murase, “On understanding visual relationships of concepts by visualizing bag-of-visual-words models,” in *Proc. 21st Meeting on Image Recognition and Understanding, Japan*, no. PS3-34 in Poster session, August 2018.

- [21] M. A. Kastner, Y. Tsuchiya, K. Osumi, R. Akiyama, L. Kawai, and H. Ikeda, “A Survey on Psychology —Connecting Perception, Language, and Memory studies with Computer Vision,” in *Proc. 21st Meeting on Image Recognition and Understanding, Japan*, no. WT-7 in Poster session, August 2018.
- [22] カストナーマークアウレル, 井手一郎, 川西康友, 平山高嗣, 出口大輔, and 村瀬洋, “Web画像の分布に基づく単語概念の視覚的な多様性の推定,” tech. rep., 情報処理学会研究報告, number 4, March 2018.

Academic services

Publication Chair	ACCV 2020
Area Chair	ACMMM 2021
Reprod. Committee	ACMMM 2021
Program Committee	ICJAI 2022-2024
Board	
Conference reviewer	ACM MM 2020-2021, IEEE MIPR 2021, IJCAI 2021, IEEE ICCV 2021, ACM ICMR 2021, ACM ICMI 2021, IEEE VCIP 2021, ACM MMAAsia 2021, CVPR 2022
Journal reviewer	IEEJ TEEE, MMSJ, ACM TOMM, IEEE TMM, SN Computer Science, IEEE Access

Academic and other societies

ACM	Association for Computing Machinery	<i>Full Member</i>
SIGMM	ACM Special Interest Group on Multimedia	<i>Full Member</i>
IPJS	Information Processing Society Japan	<i>Full Member</i>
UEA	Universal Esperanto Association	<i>Full Member</i>

Scholarships and fundings

2016–2020 **MEXT Scholarship (Monbukagakusho)**, *Government scholarship funding my PhD studies*, Ministry of Education, Culture, Sports, Science and Technology, Japan

Language skills

German	Native speaker	●●●●●
English	Fluent, CEFR C2	●●●●●

Japanese	Fluent, JLPT N1
Esperanto	Advanced
French	Pre-Intermediate

