

Academic curriculum vitae

Personal Data

Kentarô YAMAMOTO
Ústav informatiky AV ČR
Pod Vodárenskou věží 271/2
Libeň
182 00 Praha
Czech Republic

E-mail: yamamoto@cs.cas.cz

Web site: <https://www.ocf.berkeley.edu/~ykentaro/>

Employment

May 2021– Postdoctoral fellow
Institute of Computer Science (Ústav informatiky), The
Czech Academy of Sciences

Gaps in employment is due to travel restrictions from
the COVID-19 pandemic.

Education

18.12.2020 Ph.D. in Logic and the Methodology of Science
University of California, Berkeley
Thesis: *Duality for Boolean Algebra Expansions and Its
Applications*
(includes an 8-month medical leave in 2018)

December 2015 M.A. in Mathematics
University of California, Berkeley
Examination topic: Higher recursion theory, especially
the theory of Π_1^1 sets

March 2014 B.Sc. in Information Science
The University of Tokyo, Japan
Thesis: *Algorithmic Randomness and Computational Com-
plexity*

Anonymous Reviews

Journal of Philosophical Logic, Review of Symbolic Logic,
Logical Methods in Computer Science, Synthese, Ad-
vances in Modal Logic

Awards and Scholarships

- 2021 Research Fellowship for Young Researchers: PD (offered, did not accept)
Japan Society for Promotion of Science
- 2014–2018 Overseas Study Scholarship
Takenaka Scholarship Foundation

Publications

T. Moraschini, J. J. Wannenburg, and K. Yamamoto. Elementary equivalence in positive logic via prime products. *arXiv e-prints*, page arXiv:2303.02614, March 2023. Submitted to *Journal of Symbolic Logic*

K. Yamamoto. The small index property of the Fraïssé limit of finite Heyting algebras. *arXiv e-prints*, page arXiv:2204.07990, April 2022. Submitted to *Journal of Algebra*

K. Yamamoto. The Fraïssé limit of finite Heyting algebras. *arXiv e-prints*, page arXiv:2105.01291, April 2022. To appear in *Journal of Symbolic Logic*. Available at <https://arxiv.org/abs/2105.01291>

J. McDonald and K. Yamamoto. Choice-free duality for orthocomplemented lattices by means of spectral spaces. *Algebra Universalis*, 83, 2022. Available at <https://link.springer.com/article/10.1007/s00012-022-00789-y>

K. Yamamoto. Correspondence, canonicity, and model theory for monotonic modal logics. *Studia Logica*, 109(2):397–421, June 2020

K. Yamamoto. Results in modal correspondence theory for possibility semantics. *Journal of Logic and Computation*, 27(8):2411–2430, 2017

Talks

- January 2023 *Order expansions of finite Heyting algebras* (Invited).
Drafting Workshop in Discrete Mathematics and Probability 2023, Budapest, Hungary.
- January 2023 *Generalized ultraproducts for positive logic*.
British Postgraduate Model Theory Conference 2023, Leeds, the United Kingdom.
(joint work with Tommaso Moraschini and Johann J. Wannenburg)

- September 2022 *Generalized ultraproducts for positive logic.*
LOGICA 2022, Teplá, the Czech Republic.
(joint work with Tommaso Morachini and Johann J. Wannen-
enburg)
- June 2022 *The small index property of the Fraïssé limit of finite
Heyting algebras.*
Logic Colloquium 2022, Reykjavik, Iceland.
- June 2022 *The small index property of the Fraïssé limit of finite
Heyting algebras.*
Topology, Algebras and Categories in Logic 2022, Coim-
bra, Portugal.
- June 2022 *The small index property of the Fraïssé limit of finite
Heyting algebras.*
Czech Gathering of Logicians 2022, Prague, the Czech
Republic.
- December 2021 *The automorphism group of the Fraïssé limit of finite
Heyting algebras.*
Sûgaku Kisoron Wakate no Kai (Beginner Logicians'
Meeting), Kôbe, Japan (in Japanese).
- September 2021 *Choice-free duality for ortholattices by means of spectral
spaces.*
LOGICA 2021, Hejnice, Czechia.
(joint work with Joseph McDonald at University of Al-
berta)
- June 2021 *The automorphism group of the Fraïssé limit of finite
Heyting algebras.*
BLAST 2021, Las Cruces, New Mexico.
- June 2021 *The automorphism group of the Fraïssé limit of finite
Heyting algebras.*
Kurt Gödel Day 2021 & Czech Gathering of Logicians
2021, Brno, Czechia.
- April 2021 *The automorphism group of the Fraïssé limit of finite
Heyting algebras (Invited)*
Logic Seminar, Department of Mathematics, University
of Florida.
- June 2019 *Correspondence, canonicity, and model theory for mono-
tonic modal logics*
Topology, Algebra, and Categories in Logic 2019, Nice,
France.

May 2019	<i>Correspondence, canonicity, and model theory for monotonic modal logics</i> BLAST 2019, Boulder, Colorado
June 2017	<i>Algorithmic Correspondence, Canonicity and Completeness for Possibility Semantics</i> Topology, Algebra, and Categories in Logic 2017, Prague, the Czech Republic (joint work with Zhiguang Zhao at Delft University of Technology)
April 2017	<i>Algorithmic Correspondence, Canonicity and Completeness for Possibility Semantics</i> Algebra and Coalgebra meet Proof Theory VIII, Glasgow, Scotland (joint work with Zhiguang Zhao at Delft University of Technology)
December 2016	<i>Algorithmic Correspondence, Canonicity and Completeness for Possibility Semantics</i> The 8th International Workshop on Logic and Cognition: Nonclassical Logics and Their Applications, Guangzhou, China (joint work with Zhiguang Zhao at Delft University of Technology)
January 2016	<i>Modal Correspondence Theory for Possibility Semantics</i> The 50th MLG Workshop, Kyôto, Japan.
July 2014	<i>On the Computational Power of Algorithmically Random Constants in Blum–Shub–Smale Machines</i> Computability and Complexity in Analysis 2014, Darmstadt, Germany (joint work with Dr. Akitoshi Kawamura at the University of Tokyo)

Graduate Student Instructorship at UC Berkeley

Summer 2020	MATH 55 (Discrete Mathematics) I taught as the lead instructor of this course.
Spring 2020	MATH 54 (Linear Algebra and and Differential Equations)
Fall 2019	MATH 113 (Introduction to Abstract Algebra)
Spring 2018	MATH 104 (Introduction to Analysis)
Summer 2017	PHILOS 12A (Introduction to Logic)
Spring 2017	MATH 54 (Linear Algebra and and Differential Equations)

Other Teaching Experiences

- Fall 2016 Direct Reading Program (mentorship program for an undergraduate studying *Turing Computability: Theory and Applications* by Soare), UC Berkeley
- April–July 2014 Teaching Assistant (Linear Algebra), Kyoto University
- Fall 2022— Informal supervision
weekly meetings with a Ph.D. student at Department of Logic, Faculty of Philosophy, Charles University

References

- Prof. Wiesław Kubiś, Ph.D. kubis@mach.cas.cz, +420 222 090 817
Institute of Mathematics CAS
Žitná 25
115 67 Praha 1
The Czech Republic
- doc. Ing. Petr Cintula, Ph.D. vackova@cs.cas.cz, +420 266 05 3241
Institute of Computer Science CAS
Pod Vodárenskou věží 271/2
182 07 Praha 8
The Czech Republic
- Professor Wesley Holliday wesholliday@berkeley.edu +1 (510) 296-5916
246 Moses Hall #2390
University of California
Berkeley, CA 94720-2390
USA