

TAKUNARI MIYAZAKI

CURRICULUM VITÆ

Birthdate: May 29, 1969
Birthplace: Tôkyô, Japan

EDUCATION

Ph.D. in Computer and Information Science, University of Oregon, December 11, 1999
Dissertation title: *Polynomial-time computation in matrix groups*
Dissertation adviser: Professor Eugene M. Luks
M.S. in Computer and Information Science, University of Oregon, June 12, 1994
B.S. in Mathematics with Distinction, The University of Kansas, May 17, 1992

PROFESSIONAL APPOINTMENTS

2007– Associate Professor of Computer Science
Trinity College, Hartford, Connecticut
2020–2023 Associate Dean for Faculty Development
Trinity College, Hartford, Connecticut
2015–2020 Chair, Computer Science Department
Trinity College, Hartford, Connecticut
2001–2007 Assistant Professor of Computer Science
Trinity College, Hartford, Connecticut
2000–2001 Assistant Professor of Computer Science
Bucknell University, Lewisburg, Pennsylvania

VISITING POSITIONS

1992 (Summer) Research Intern, Central Research Laboratories
Matsushita Electric Industrial Company, Limited, Ôsaka, Japan
2004 (Fall) Visiting Scholar, College of Computer and Information Science
Northeastern University, Boston, Massachusetts
2007 (Summer) Visiting Scholar, Department of Computer Science and System Analysis
Nihon University, Tôkyô, Japan
2015 (Fall) Distinguished Visiting Professor, Department of Mathematics
Bucknell University, Lewisburg, Pennsylvania

FELLOWSHIPS, HONORS AND AWARDS

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| 1990–1991 | U. G. Mitchell Scholarship, Department of Mathematics
The University of Kansas |
| 1991–1992 | Black–Babcock Scholarship, Department of Mathematics
The University of Kansas |
| 1993–1999 | Graduate Teaching Fellow, Department of Computer and Information Science
University of Oregon |
| 2015 (Fall) | Distinguished Visiting Professor, Department of Mathematics
Bucknell University |
| 2020 | Full Member, Sigma Xi |

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BIBLIOGRAPHY

PUBLICATIONS

1. *The complexity of McKay's canonical labeling algorithm*, Groups and Computation. II, Piscataway, New Jersey, June 7–10, 1995 (Larry Finkelstein and William M. Kantor, editors), DIMACS Series in Discrete Mathematics and Theoretical Computer Science, volume 28, American Mathematical Society, Providence, Rhode Island, 1997, pages 239–256. MR1444139 (98c:05119) Zbl 0878.05063
2. *Polynomial-time computation in matrix groups*, Ph.D. Dissertation, Technical Report CIS-TR-99-11, Department of Computer and Information Science, University of Oregon, Eugene, Oregon, 1999. MR2700147
3. *Deterministic algorithms for management of matrix groups*, Groups and Computation. III, Columbus, Ohio, June 15–19, 1999 (William M. Kantor and Ákos Seress, editors), Ohio State University Mathematical Research Institute Publications, volume 8, de Gruyter, Berlin, Germany, 2001, pages 265–280. MR1829486 (2002i:20022) Zbl 1038.20006
4. (with Eugene M. Luks) *Polynomial-time normalizers for permutation groups with restricted composition factors*, Proceedings of the 2002 International Symposium on Symbolic and Algebraic Computation, Villeneuve d'Ascq, France, July 7–10, 2002 (Teo Mora, editor), Association for Computing Machinery, New York, New York, 2002, pages 176–183. MR2035247 (2005d:20006) Zbl 1072.68683
5. *On the complexities of intersection problems in permutation groups*, Proceedings of the First International Conference on Mathematical Aspects of Computer and Information Sciences, Běijīng, China, July 24–26, 2006 (Dongming Wang and Zhiming Zheng, editors), Běijīng University of Aeronautics & Astronautics, Běijīng, China, 2006, pages 175–180.
6. *On the asymmetric complexity of the group-intersection problem*, Information Processing Letters **107** (2008), 188–193. MR2436911 (2009k:68095) Zbl 1186.68222
7. (with Nicolae Dragu '12, Fouad Elkhoury, Ralph A. Morelli and Nicolás di Tada) *Ontology-based text mining for predicting disease outbreaks*, Proceedings of the Twenty-Third International Florida Artificial Intelligence Research Society Conference, Daytona Beach Shores, Florida, May 19–21, 2010 (Hans W. Guesgen and R. Charles Murray, editors), Association for the Advancement of Artificial Intelligence, Menlo Park, California, 2010, pages 142–143.
8. (with Eugene M. Luks) *Polynomial-time normalizers*, Special issue in honor of Laci Babai's 60th birthday, Discrete Mathematics & Theoretical Computer Science **13**(4) (2011), 61–96. MR2862561 (2012j:20010) Zbl 1286.68519
9. グラフ同型性判定について——群論的手法の軌跡と成果——, LA シンポジウム会誌 **66** (2016), 26–32.
10. *On testing isomorphism of graphs of bounded eigenvalue multiplicity*, Mathematical Aspects of Computer and Information Sciences, 7th International Conference, Vienna, Austria, November 15–17, 2017, Proceedings (Johannes Blömer, Ilias S. Kotsireas, Temur Kutsia and Dimitris E. Simos, editors), Lecture Notes in Computer Science, volume 10693, Springer, Heidelberg, Germany, 2017, pages 325–329. Zbl 07036065

11. *On the complexity of testing isomorphism of graphs of bounded eigenvalue multiplicity*, Symmetry vs. Regularity, Pilsen, Czechia, July 1–7, 2018 (Alexander A. Ivanov, Mikhail Klin, Akihiro Munemasa and Roman Nedela, editors), Union of Czech Mathematicians and Physicists and the University of West Bohemia in Pilsen, Pilsen, Czechia, 2018, page 51.

COMMENTS

1. *Luks's reduction of graph isomorphism to code equivalence*, Comment to W. Edwin Clark, 1996.

WORK IN PROGRESS

1. (with James B. Wilson) *Linear-size reductions and completeness in algebra*, preprint.
2. (with Peter A. Brooksbank and James B. Wilson) *On the futility of computational models of problems in NP*, in preparation.
3. (with Peter Zeman) *On the problem of computing canonical forms of graphs: limitations of individualization-refinement methods*, in preparation.