

Solon P. Pissis

Doctor of Philosophy

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Education

- 2016 **Postgraduate Certificate in Academic Practice in Higher Education**, KING'S COLLEGE LONDON, *London, UK*.
- 2012 **Ph.D in Computing**, KING'S COLLEGE LONDON, *London, UK*.
External examiners: Prof. Roberto Grossi and Prof. Rajeev Raman
- 2008 **M.Sc in High Performance Computing**, UNIVERSITY OF EDINBURGH, *Edinburgh, UK*.
- 2007 **Four-year Diploma in Informatics and Telecommunications**, NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS, *Athens, Greece*.

Appointments

- Jan 2019 - Present **Senior Researcher**, CENTRUM WISKUNDE & INFORMATICA, *Amsterdam, Netherlands*.
Networks & Optimization group
- Mar 2020 - Present **Visiting Associate Professor**, VRIJE UNIVERSITEIT AMSTERDAM, *Amsterdam, Netherlands*.
Department of Computer Science
- May 2019 - Apr 2022 **Visiting Research Associate**, KING'S COLLEGE LONDON, *London, UK*.
Department of Informatics
- Sep 2018 - Dec 2018 **Senior Lecturer (Associate Professor) in Computer Science**, KING'S COLLEGE LONDON, *London, UK*.
Department of Informatics
- Sep 2013 - Aug 2018 **Lecturer (Assistant Professor) in Computer Science**, KING'S COLLEGE LONDON, *London, UK*.
Department of Informatics
- Feb 2012 - Jun 2013 **Research Associate**, UNIVERSITY OF FLORIDA, *Gainesville, FL, USA*.
- Feb 2012 - Jun 2013 **Visiting Scientist**, HEIDELBERG INSTITUTE FOR THEORETICAL STUDIES, *Heidelberg, Germany*.
- Nov 2011 - Jan 2012 **Postdoctoral Fellow**, HEIDELBERG INSTITUTE FOR THEORETICAL STUDIES, *Heidelberg, Germany*.

Research Grants and Fellowships

- 2023** Royal Society International Exchanges Scheme with Birkbeck, University of London on *Sub-linear Time Algorithms for Relaxations of the LCS and LPS Problems* – Role: Co-Applicant.
- 2021** Marie Skłodowska-Curie Innovative Training Network (MSCA-ITN-2020) on *ALgorithms for PAngenoME Computational Analysis* (ALPACA) – Role: Project supervisor.
- 2020** Marie Skłodowska-Curie Research and Innovation Staff Exchange (MSCA-RISE-2019) on *Pan-genome Graph Algorithms and Data Integration* (PANGAIA) – Role: Workpackage leader.
- 2019** Visiting Fellowship, Department of Computer Science, University of Pisa.
- 2018** Royal Society International Exchanges Scheme with the University of Central Florida, USA, on *Efficient Indexes for Uncertain Sequences*.
- 2017** Royal Society International Exchanges Scheme with the University of Pisa, Italy, on *Processing Uncertain Sequences: Combinatorics & Applications*.
- 2017** Research in Pairs Grant (Scheme 4) awarded by the London Mathematical Society.
- 2017** Computer Science Small Grant (Scheme 7) awarded by the London Mathematical Society.
- 2016** Royal Society International Exchanges Scheme with the Mediterranean Agro-nomic Institute of Chania, Greece, on *Novel Algorithmic Methods for Processing Large-Scale Biological Data*.
- 2016** Computer Science Small Grant (Scheme 7) awarded by the London Mathematical Society.
- 2015** Royal Society International Exchanges Scheme with the University of Newcastle, Australia, on *Algorithms and Software for Finding Super/Megabubbles in Assembly Graphs*.
- 2015** Computer Science Small Grant (Scheme 7) awarded by the London Mathematical Society.
- 2014** Small Grant awarded by the Institute of Mathematics and its Applications.
- 2014** Short Term Scientific Mission Grant awarded by the European Cooperation in Science and Technology.
- 2014** Research Grant awarded by the Royal Society on *High-performance computing tools and libraries for sequencing data*.
- 2014** Financial Support for International Short Visits (Scheme 5) awarded by the London Mathematical Society.
- 2013** Financial Support for Conferences (Scheme 1) awarded by the London Mathematical Society.

Awards

- 2022 SPIRE 2022 Best Paper Award**, sponsored by Springer, for paper “Panagiotis Charalampopoulos, Solon P. Pissis, Jakub Radoszewski, Wojciech Rytter, Tomasz Walen, Wiktor Zuba. Subsequence Covers of Words”.
- 2018 SPIRE 2018 Best Paper Award**, sponsored by Springer, for paper “Mai Alzamel, Panagiotis Charalampopoulos, Costas S. Iliopoulos, Tomasz Kociumaka, Solon P. Pissis, Jakub Radoszewski, Juliusz Straszynski. Efficient Computation of Sequence Mappability”.
- 2017 SPIRE 2017 Best Paper Award**, sponsored by Springer, for paper “Amihod Amir, Panagiotis Charalampopoulos, Costas S. Iliopoulos, Solon P. Pissis, and Jakub Radoszewski. Longest common factor after one edit operation”.

Keynote Talks

- Combinatorial Algorithms for String Sanitization. *28th London Stringology Days & London Algorithmic Workshop*, King's College London, London, UK, 2020.

Invited Talks

- Algorithms at Scale: Theory, practice, and applications. *MSc in Data Science Seminar*, University of Nicosia, Nicosia, Cyprus, 2025.
- Text indexing for long patterns: Anchors are all you need. *Departmental Seminar*, University of Milano-Bicocca, Milan, Italy, 2023.
- Pattern Matching on a Special Type of DAGs. *Algorithms Seminar*, University of Utrecht, Utrecht, Netherlands, 2023.
- Pattern Matching on a Special Type of DAGs. *Words and Automata Research Group Seminar*, University of Palermo, Palermo, Italy, 2022.
- Faster Algorithms for Longest Common Substring. *Computer Science Seminar Series*, University of Bar-Ilan, Ramat Gan, Israel, 2021 (Virtual).
- Bidirectional String Anchors: A New String Sampling Mechanism. *Algorithms Group Seminar Series*, University of Warsaw, Warsaw, Poland, 2021 (Virtual).
- On String Sanitization. *Lecture series on the subject “The interplay between fundamental computer science and data science”*, Georg-August-Universität Göttingen, Göttingen, Germany, 2021 (Virtual).
- Pattern Masking for Dictionary Masking. *Computer Science Seminar Series*, University of Bar-Ilan, Ramat Gan, Israel, 2020 (Virtual).
- Reverse-Safe Data Structures for Text Indexing. *Computer Science Seminar Series*, University of Pisa, Pisa, Italy, 2019.
- Even Faster Elastic-Degenerate String Matching via Fast Matrix Multiplication. *Algorithms Group Seminar Series*, University of Warsaw, Warsaw, Poland, 2019.

- When linear space is impractical: computing absent words in output-sensitive space. *Bonsai Bioinformatics Seminar Series*, Université de Lille, Lille, France, 2019.
- Elastic-degenerate strings: a new representation for pattern matching in a collection of similar texts. *Computer Science Seminar Series*, University of Pisa, Pisa, Italy, 2019.
- Elastic-degenerate strings: a new representation for pattern matching in a collection of similar texts. *Life Sciences and Health Seminar Series*, Centrum Wiskunde & Informatica, Amsterdam, Netherlands, 2018.
- Elastic-degenerate strings: a new representation for pattern matching in a collection of similar texts. *Seminari del Dipartimento di Matematica e Informatica*, Dipartimento di Matematica e Informatica, University of Palermo, Italy, 2018.
- Searching in Uncertain Texts. *Computer Science Seminar Series*, Department of Computer Science, Loughborough University, Loughborough, UK, 2017.
- Searching in Uncertain Texts. *Séminaires*, Laboratoire d'informatique de l'Institut Gaspard Monge, Université Paris-Est, Marne-la-Vallée, France, 2017.
- Alignment-Free Sequence Comparison: Using Positive and Negative Information. *Computer Science Seminars*, Department of Computer Science, University of Leicester, Leicester, UK, 2016.
- Sequence Comparison Using Positive and Negative Information. *Workshop on Data Structures in Bioinformatics*, Lab. of Computational Methods for the Analysis of the Diversity and Dynamics of Genomes, Bielefeld University, Bielefeld, Germany, 2016.
- Pattern Matching on Uncertain Strings. *Workshop on Bioinformatics and Stringology*, Bangladesh University of Engineering and Technology, Dhaka, Bangladesh, 2015.
- Accurate and efficient methods for improving multiple circular sequence alignment. *Workshop on Data Structures in Bioinformatics*, Lab. of Computer Science, Robotics and Microelectronics of Montpellier, Montpellier, France, 2014.
- Finding subtree repeats to slash the time for phylogenetic analyses. *Theo Murphy International scientific meeting on Storage and Indexing of massive data*, The Royal Society at Chicheley Hall, home of the Kavli Royal Society International Centre, Buckinghamshire, UK, 2013.
- Single-gap & phylogeny-aware alignment of NGS reads. *ICIS Summer Workshop on Developing a Next-Generation Systems Analysis Library*, The Institute for Computing in Science (ICIS), Argonne National Laboratory, Utah, USA, 2012.
- Aligning next-generation sequencing reads to multiple reference genomes. *AdvOL Optimization Seminars*, McMaster University, Hamilton, Canada, 2011.

- Algorithms for identifying periodic structures. *Digital Ecosystems and Business Intelligence Institute (DEBII) Seminars*, Curtin University, Perth, Australia, 2011.

Editorial Work

- 2025 - present** Editorial Board Member, Algorithmica
- 2025 - present** Advisory Board Member, TheoretiCS
- 2025 - present** Guest Editor, Algorithms Mol. Biol.
- 2018** Guest Editor, Journal of Theoretical Computer Science
- 2018** Guest Editor, Fundamenta Informaticae
- 2015** Guest Editor, Journal of Discrete Algorithms
- 2014 - 2018** Assistant Managing Editor, Journal of Discrete Algorithms

Steering Committee Memberships

- 2023 - Present** European Symposium on Algorithms (ESA)
- 2023 - Present** SIAM Symposium on Algorithm Engineering and Experiments (ALENEX)

Programme Committee Memberships

- SIAM Symposium on Algorithm Engineering and Experiments (ALENEX 2021, 2024 **Co-Chair**)
- Symposium on Combinatorial Pattern Matching (CPM 2016, 2019 **Co-Chair**, 2020, 2022, 2025)
- International Symposium on Experimental Algorithms (SEA 2017) — **Co-Chair**
- Workshop on Algorithms in Bioinformatics (WABI 2018, 2020, 2021, 2022, 2023, 2024 — **Co-Chair**, 2025)
- The Prague Stringology Conference (PSC 2023) — **Co-Chair**, 2025
- European Symposium on Algorithms (ESA 2026 Track S)
- International Symposium on Algorithm and Computation (ISAAC 2022)
- Latin American Theoretical Informatics Symposium (LATIN 2026)
- European Conference on Computational Biology (ECCB 2020, 2022)
- Symposium on String Processing and Information Retrieval (SPIRE 2015, 2017, 2019, 2020, 2021, 2022, 2025)
- International Conference on Fun with Algorithms (FUN 2020)
- International Conference on Current Trends in Theory and Practice of Computer Science (SOFSEM 2021)
- International Workshop on Combinatorial Algorithms (IWOCA 2013, 2014, 2015, 2016, 2017, 2018, 2019)
- Computability in Europe (CiE 2022)
- International Conference and Workshop on Algorithms and Computation (WALCOM 2018, 2020)

Organising Committee Memberships

- European Symposium on Algorithms (ALGO 2023) — **Chair**
- ECCB 2020 Workshop on Computational Pangenomics: Algorithms & Applications — **Co-Chair**
- London Stringology Days & London Algorithmic Workshop (LSD & LAW 2009, 2010, 2011, 2014 **Chair**, 2015, 2017, 2018, 2019)
- International Symposium on Experimental Algorithms (SEA 2017) — **Chair**
- String Processing and Information Retrieval (SPIRE 2015) — **Chair**
- Symposium on Combinatorial Pattern Matching (CPM 2019)
- International Workshop on Combinatorial Algorithms (IWOCA 2010)
- Workshop on Mathematical Foundations in Bioinformatics (MatBio 2016, 2017)
- StringMasters (2010)
- King's College London - Hong Kong University Joint Workshop (2010, 2011, 2014)

Ph.D Supervision (Lead Supervisor)

2024 - present **Ben Bals**

2022 - present **Hilde Verbeek**

2019 - 2024 **Michelle Sweering**: Writing up.

2021 - 2024 **Esteban Gabory**: Successfully defended his Ph.D thesis on 21/5/25 at the Vrije Universiteit Amsterdam. On 1/9/24, Esteban joined the Dipartimento di Matematica e Informatica at the University of Palermo as a Postdoctoral Researcher.

2015 - 2019 **Lorraine A.K. Ayad**: Successfully defended her Ph.D thesis on 27/2/19 at King's College London. On 2/1/19, Lorraine joined the Department of Informatics at King's College London as a Lecturer in Computer Science.

2015 - 2019 **Chang Liu**: Successfully defended his Ph.D thesis on 6/2/19 at King's College London. On 2/1/19, Chang joined the Cancer Bioinformatics group at King's College London as a Postdoctoral Cancer Bioinformatician.

2014 - 2018 **Ahmad Retha**: Successfully defended his Ph.D thesis on 7/11/18 at King's College London. On 12/11/18, Ahmad joined Dotmatics, a scientific informatics company based in the UK, as a software developer for biological visualisation and data analytics.

Teaching

2019 - Present Department of Computer Science at Vrije Universiteit

- Algorithms in Sequence Analysis (2019 - 2020, 2020 - 2021, 2021 - 2022, 2022 - 2023, 2023 - 2024, 2024 - 2025, 2025 - 2026)
- Fundamentals of Bioinformatics (2019 - 2020, 2020 - 2021, 2021 - 2022, 2022 - 2023)

- 2013 - 2018** Department of Informatics at King's College London
- Algorithms Design and Analysis (2018 - 2019)
 - Algorithms for Computational Molecular Biology (2013 - 2014, 2014 - 2015, 2015 - 2016, 2016 - 2017, 2017 - 2018)
 - Text Searching and Processing (2013 - 2014, 2016 - 2017, 2017 - 2018, 2018 - 2019)
 - Parallel (and Distributed) Algorithms (2015 - 2016)
 - Software Engineering Group Project (2017 - 2018, 2018 - 2019)
 - Database Systems (2014 - 2015)
- Nov 2018** Department of Informatics, Systems and Communication at University of Milano-Bicocca
- Ph.D level - Efficient and succinct data structures for massive textual data

Project Assessment Committees

- 2025 - 2026** Member of the assessment committee for the ENW Vidi 2025 programme
- 2024 - 2025** Member of the assessment committee for the ENW Vidi 2024 programme

Ph.D External Examiner

- 26 Jul 2023** Bella Zhukova (*New space-time trade-offs for pattern matching with compressed indexes*), University of Helsinki, Finland
- 01 Jun 2023** Giuseppe Romana (*Repetitiveness Measures based on String Attractors and Burrows-Wheeler Transform: Properties and Applications*), University of Palermo, Italy
- 26 Apr 2022** Teresa Anna Steiner (*Algorithms for Strings and Graphs*), Technical University of Denmark, Denmark
- 07 Apr 2021** Daniel Gibney (*Algorithms and lower bounds for ordering problems on strings*), University of Central Florida, USA
- 11 Jan 2019** Corne De Ridder (*Automata-based algorithms for detecting minisatellites and satellites in DNA*), University of Pretoria, South Africa
- 15 Dec 2017** Asma Paracha (*Lyndon Factors and Periodicities in Strings*), McMaster University, Canada

Administrative Duties

- 2013 - 2018** Deputy Chair of the Informatics Undergraduate Programme Board of Examiners, at King's College London

Publications

- [1] Christine Awofeso, Ben Bals, Oded Lachish, and Solon P. Pissis. Testing quasiperiodicity. In Golnaz Badkobeh, Jakub Radoszewski, Nicola Tonellootto, and Ricardo Baeza-Yates, editors, *String Processing and Information Retrieval - 32nd International Symposium, SPIRE 2025, London, UK, September 8-11, 2025, Proceedings*, volume 16073 of *Lecture Notes in Computer Science*, pages 1–9. Springer, 2025. doi:10.1007/978-3-032-05228-5__1.
- [2] Lorraine A. K. Ayad, Gabriele Fici, Ragnar Groot Koerkamp, Grigorios Loukides, Rob Patro, Giulio Ermanno Pibiri, and Solon P. Pissis. U-index: A universal indexing framework for matching long patterns. In Petra Mutzel and Nicola Prezza, editors, *23rd International Symposium on Experimental Algorithms, SEA 2025, July 22-24, 2025, Venice, Italy*, volume 338 of *LIPICS*, pages 4:1–4:18. Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 2025. doi:10.4230/LIPICS.SEA.2025.4.
- [3] Lorraine A. K. Ayad, Grigorios Loukides, and Solon P. Pissis. Text indexing for long patterns using locally consistent anchors. *VLDB J.*, 34(5):58, 2025. doi:10.1007/S00778-025-00935-7.
- [4] Ben Bals, Sebastiaan van Krieken, Solon P. Pissis, Leen Stougie, and Hilde Verbeek. When is string reconstruction using de Bruijn graphs hard? In Anne Benoit, Haim Kaplan, Sebastian Wild, and Grzegorz Herman, editors, *33rd Annual European Symposium on Algorithms, ESA 2025, September 15-17, 2025, Warsaw, Poland*, volume 351 of *LIPICS*, pages 53:1–53:16. Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 2025. doi:10.4230/LIPICS.ESA.2025.53.
- [5] Giulia Bernardini, Huiping Chen, Alessio Conte, Roberto Grossi, Veronica Guerrini, Grigorios Loukides, Nadia Pisanti, and Solon P. Pissis. Indexing strings with utilities. In *41st IEEE International Conference on Data Engineering, ICDE 2025, Hong Kong, May 19-23, 2025*, pages 2782–2795. IEEE, 2025. doi:10.1109/ICDE65448.2025.00209.
- [6] Giulia Bernardini, Huiping Chen, Grigorios Loukides, and Solon P. Pissis. On string and graph sanitization. In Alessio Conte, Andrea Marino, Giovanna Rosone, and Jeffrey Scott Vitter, editors, *From Strings to Graphs, and Back Again: A Festschrift for Roberto Grossi's 60th Birthday, Grossi's Festschrift, July 25, 2025, Venice, Italy*, volume 132 of *OASIcs*, pages 9:1–9:10. Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 2025. doi:10.4230/OASIcs.GROSSI.9.
- [7] Giulia Bernardini, Chang Liu, Grigorios Loukides, Alberto Marchetti-Spaccamela, Solon P. Pissis, Leen Stougie, and Michelle Sweering. Missing value replacement in strings and applications. *Data Min. Knowl. Discov.*, 39(2):12, 2025. doi:10.1007/S10618-024-01074-3.
- [8] Panagiotis Charalampopoulos, Solon P. Pissis, Jakub Radoszewski, Wojciech

- Rytter, Tomasz Walen, and Wiktor Zuba. Subsequence covers of words. *Theor. Comput. Sci.*, 1041:115216, 2025. doi:10.1016/J.TCS.2025.115216.
- [9] Estéban Gabory, Njagi Moses Mwaniki, Nadia Pisanti, Solon P. Pissis, Jakub Radoszewski, Michelle Sweering, and Wiktor Zuba. Elastic-degenerate string comparison. *Inf. Comput.*, 304:105296, 2025. doi:10.1016/J.IC.2025.105296.
 - [10] Paweł Gawrychowski, Adam Górkiewicz, Pola Marciniāk, Solon P. Pissis, and Karol Pokorski. Faster approximate elastic-degenerate string matching - part B. In Paola Bonizzoni and Veli Mäkinen, editors, *36th Annual Symposium on Combinatorial Pattern Matching, CPM 2025, June 17-19, 2025, Milan, Italy*, volume 331 of *LIPICS*, pages 29:1–29:21. Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 2025. doi:10.4230/LIPICS.CPM.2025.29.
 - [11] Ling Li, Hilde Verbeek, Huiping Chen, Grigorios Loukides, Robert Gwadera, Leen Stougie, and Solon P. Pissis. Heavy nodes in a small neighborhood: Exact and peeling algorithms with applications. *IEEE Trans. Knowl. Data Eng.*, 37(4):1853–1870, 2025. doi:10.1109/TKDE.2024.3515875.
 - [12] Solon P. Pissis. Optimal prefix-suffix queries with applications. In Ioana Oriana Bercea and Rasmus Pagh, editors, *2025 Symposium on Simplicity in Algorithms, SOSA 2025, New Orleans, LA, USA, January 13-15, 2025*, pages 166–171. SIAM, 2025. doi:10.1137/1.9781611978315.13.
 - [13] Solon P. Pissis, Jakub Radoszewski, and Wiktor Zuba. Faster approximate elastic-degenerate string matching - part A. In Paola Bonizzoni and Veli Mäkinen, editors, *36th Annual Symposium on Combinatorial Pattern Matching, CPM 2025, June 17-19, 2025, Milan, Italy*, volume 331 of *LIPICS*, pages 28:1–28:19. Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 2025. doi:10.4230/LIPICS.CPM.2025.28.
 - [14] Wiktor Zuba, Oded Lachish, and Solon P. Pissis. Minimizers in semi-dynamic strings. In Artur Jez and Jan Otop, editors, *Fundamentals of Computation Theory - 25th International Symposium, FCT 2025, Wrocław, Poland, September 15-17, 2025, Proceedings*, volume 16106 of *Lecture Notes in Computer Science*, pages 434–447. Springer, 2025. doi:10.1007/978-3-032-04700-7_32.
 - [15] Wiktor Zuba, Oded Lachish, and Solon P. Pissis. Shortest undirected paths in de bruijn graphs. In Paola Bonizzoni and Veli Mäkinen, editors, *36th Annual Symposium on Combinatorial Pattern Matching, CPM 2025, June 17-19, 2025, Milan, Italy*, volume 331 of *LIPICS*, pages 12:1–12:13. Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 2025. doi:10.4230/LIPICS.CPM.2025.12.
 - [16] Lorraine A. K. Ayad, Grigorios Loukides, Solon P. Pissis, and Hilde Verbeek. Sparse suffix and LCP array: Simple, direct, small, and fast. In José A. Soto and Andreas Wiese, editors, *LATIN 2024: Theoretical Informatics - 16th Latin American Symposium, Puerto Varas, Chile, March 18-22, 2024*,

Proceedings, Part I, volume 14578 of *Lecture Notes in Computer Science*, pages 162–177. Springer, 2024. doi:10.1007/978-3-031-55598-5_11.

- [17] Giulia Bernardini, Huiping Chen, Alessio Conte, Roberto Grossi, Veronica Guerrini, Grigoris Loukides, Nadia Pisanti, and Solon P. Pissis. Utility-oriented string mining. In Shashi Shekhar, Vagelis Papalexakis, Jing Gao, Zhe Jiang, and Matteo Riondato, editors, *Proceedings of the 2024 SIAM International Conference on Data Mining, SDM 2024, Houston, TX, USA, April 18-20, 2024*, pages 190–198. SIAM, 2024. doi:10.1137/1.9781611978032.22.
- [18] Giulia Bernardini, Huiping Chen, Inge Li Gørtz, Christoffer Krogh, Grigoris Loukides, Solon P. Pissis, Leen Stougie, and Michelle Sweering. Connecting de Bruijn Graphs. In Shunsuke Inenaga and Simon J. Puglisi, editors, *35th Annual Symposium on Combinatorial Pattern Matching (CPM 2024)*, volume 296 of *Leibniz International Proceedings in Informatics (LIPIcs)*, pages 6:1–6:16. Schloss Dagstuhl – Leibniz-Zentrum für Informatik, Dagstuhl, Germany, 2024. ISBN 978-3-95977-326-3. ISSN 1868-8969. doi:10.4230/LIPIcs.CPM.2024.6.
- [19] Giulia Bernardini, Estéban Gabory, Solon P. Pissis, Leen Stougie, Michelle Sweering, and Wiktor Zuba. Elastic-degenerate string matching with 1 error or mismatch. *Theory Comput. Syst.*, 68(5):1442–1467, 2024. doi:10.1007/S00224-024-10194-8.
- [20] Philip Bille, Inge Li Gørtz, Moshe Lewenstein, Solon P. Pissis, Eva Rotenberg, and Teresa Anna Steiner. Gapped String Indexing in Subquadratic Space and Sublinear Query Time. In Olaf Beyersdorff, Mamadou Moustapha Kanté, Orna Kupferman, and Daniel Lokshtanov, editors, *41st International Symposium on Theoretical Aspects of Computer Science (STACS 2024)*, volume 289 of *Leibniz International Proceedings in Informatics (LIPIcs)*, pages 16:1–16:21. Schloss Dagstuhl – Leibniz-Zentrum für Informatik, Dagstuhl, Germany, 2024. ISBN 978-3-95977-311-9. ISSN 1868-8969. doi:10.4230/LIPIcs.STACS.2024.16.
- [21] Philip Bille, Yakov Nekrich, and Solon P. Pissis. Size-Constrained Weighted Ancestors with Applications. In Hans L. Bodlaender, editor, *19th Scandinavian Symposium and Workshops on Algorithm Theory (SWAT 2024)*, volume 294 of *Leibniz International Proceedings in Informatics (LIPIcs)*, pages 14:1–14:12. Schloss Dagstuhl – Leibniz-Zentrum für Informatik, Dagstuhl, Germany, 2024. ISBN 978-3-95977-318-8. ISSN 1868-8969. doi:10.4230/LIPIcs.SWAT.2024.14.
- [22] Panagiotis Charalampopoulos, Huiping Chen, Peter Christen, Grigoris Loukides, Nadia Pisanti, Solon P. Pissis, and Jakub Radoszewski. Pattern masking for dictionary matching: Theory and practice. *Algorithmica*, 86(6):1948–1978, 2024. doi:10.1007/S00453-024-01213-8.
- [23] Panagiotis Charalampopoulos, Solon P. Pissis, Jakub Radoszewski, Wojciech Rytter, Tomasz Waleń, and Wiktor Zuba. Approximate Circular Pattern

- Matching Under Edit Distance. In Olaf Beyersdorff, Mamadou Moustapha Kanté, Orna Kupferman, and Daniel Lokshtanov, editors, *41st International Symposium on Theoretical Aspects of Computer Science (STACS 2024)*, volume 289 of *Leibniz International Proceedings in Informatics (LIPIcs)*, pages 24:1–24:22. Schloss Dagstuhl – Leibniz-Zentrum für Informatik, Dagstuhl, Germany, 2024. ISBN 978-3-95977-311-9. ISSN 1868-8969. doi:10.4230/LIPIcs.STACS.2024.24.
- [24] Huiping Chen, Alessio Conte, Roberto Grossi, Grigorios Loukides, Solon P. Pissis, and Michelle Sweering. On breaking truss-based and core-based communities. *ACM Trans. Knowl. Discov. Data*, 18(6):135:1–135:43, 2024. doi:10.1145/3644077.
 - [25] Estéban Gabory, Chang Liu, Grigorios Loukides, Solon P. Pissis, and Wiktor Zuba. Space-efficient indexes for uncertain strings. In *40th IEEE International Conference on Data Engineering, ICDE 2024, Utrecht, The Netherlands, May 13-16, 2024*, pages 4828–4842. IEEE, 2024. doi:10.1109/ICDE60146.2024.00367.
 - [26] Ling Li, Wiktor Zuba, Grigorios Loukides, Solon P. Pissis, and Maria Mat-sangidou. Scalable order-preserving pattern mining. In Elena Baralis, Kun Zhang, Ernesto Damiani, Mérouane Debbah, Panos Kalnis, and Xindong Wu, editors, *IEEE International Conference on Data Mining, ICDM 2024, Abu Dhabi, United Arab Emirates, December 9-12, 2024*, pages 211–220. IEEE, 2024. doi:10.1109/ICDM59182.2024.00028.
 - [27] Hilde Verbeek, Lorraine A.K. Ayad, Grigorios Loukides, and Solon P. Pissis. Minimizing the Minimizers via Alphabet Reordering. In Shunsuke Inenaga and Simon J. Puglisi, editors, *35th Annual Symposium on Combinatorial Pattern Matching (CPM 2024)*, volume 296 of *Leibniz International Proceedings in Informatics (LIPIcs)*, pages 28:1–28:13. Schloss Dagstuhl – Leibniz-Zentrum für Informatik, Dagstuhl, Germany, 2024. ISBN 978-3-95977-326-3. ISSN 1868-8969. doi:10.4230/LIPIcs.CPM.2024.28.
 - [28] Haodi Zhong, Grigorios Loukides, Alessio Conte, and Solon P. Pissis. Ego-network segmentation via (weighted) Jaccard median. *IEEE Trans. Knowl. Data Eng.*, 36(9):4646–4663, 2024. doi:10.1109/TKDE.2024.3373712.
 - [29] Wiktor Zuba, Grigorios Loukides, Solon P. Pissis, and Sharma V. Thankachan. Approximate suffix-prefix dictionary queries. In Rastislav Královic and Antonín Kucera, editors, *49th International Symposium on Mathematical Foundations of Computer Science, MFCS 2024, August 26-30, 2024, Bratislava, Slovakia*, volume 306 of *LIPIcs*, pages 85:1–85:18. Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 2024. doi:10.4230/LIPICS.MFCS.2024.85.
 - [30] Mai Alzamel, Christopher Hampson, Costas S. Iliopoulos, Zara Lim, Solon P. Pissis, Dimitrios Vlachakis, and Steven Watts. Maximal degenerate palindromes with gaps and mismatches. *Theor. Comput. Sci.*, 978:114182, 2023. doi:10.1016/j.tcs.2023.114182.

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