

CURRICULUM VITAE

Personal information

First name: Giannos
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Affiliation: LIRMM, Univ Montpellier, CNRS, Montpellier, France
Languages: Greek, English (C2), fluent French, incomplete knowledge of Spanish

Studies

2013 - 2017: B.Sc. in Mathematics
Department of Mathematics, National and Kapodistrian University of Athens, Greece.
GPA: 8.34/10. Ranked in top 10% of graduating class.

2017 - 2020: Inter-Institutional Graduate Program “Algorithms, Logic and Discrete Mathematics”, Athens, Greece.
M.Sc. Thesis: *Decompositions and Algorithms for the Disjoint Paths Problem in Planar Graphs*.
Advisor: Stavros G. Kolliopoulos.
GPA: 9.33/10. Ranked *first* in his graduating class.

2020 - now: PhD Studies
Institution: Université de Montpellier, Montpellier, France.
Subject: Algorithmic Meta-theorems on graph modification problems.
Research Team: ALGCo, Laboratoire d’Informatique, de Robotique et de Microélectronique de Montpellier (LIRMM).
Advisors: Ignasi Sau and Dimitrios Thilikos.
Expected date of award of PhD: 10/2023

Research visits

09/2019
(2 weeks) Laboratoire d’Informatique, de Robotique et de Microélectronique de Montpellier (LIRMM), Montpellier, France.
Host: Ignasi Sau.
Subject of research: *Algorithmic Meta-theorems on Planar Graphs*.

11/2019 -
(2 weeks) Laboratoire d’Informatique, de Robotique et de Microélectronique de Montpellier (LIRMM), Montpellier, France.
Host: Ignasi Sau.
Subject of research: *Parameterized Algorithms for Graph Modification Problems*.

09/2021
(2 weeks) Algorithms Research Group, Department of Informatics, University of Bergen, Norway.
Host: Fedor V. Fomin.
Subject of research: *Parameterized Algorithms for Frameworks*.

10/2022
(1 week) AG Theoretische Informatik group, Faculty 3 - Mathematics and Computer Science, University of Bremen, Bremen, Germany.
Host: Sebastian Siebertz.
Subject of research: *Algorithmic meta-theorems on topological minor free graph classes*.

12/2022
(4 weeks) Discrete Mathematics Group, Institute for Basic Science (IBS), Daejeon, Republic of Korea.
Host: Sang-il Oum.
Subject of research: *Structural Graph Theory and Algorithmic Meta-Theorems*.

Papers

Papers published in international journals.

- (1) Petr A. Golovach, *Giannos Stamoulis*, and Dimitrios M. Thilikos.
Hitting Topological Minor Models in Planar Graphs is Fixed Parameter Tractable.
Accepted in *ACM Transactions of Algorithms (TALG)*, 2022.
- (2) Ignasi Sau, *Giannos Stamoulis*, and Dimitrios M. Thilikos.
 k -apices of minor-closed graph classes. II. Parameterized algorithms.
ACM Transactions of Algorithms (TALG), 18(3): 21:1-21:30, 2022.
- (3) Fedor V. Fomin, Petr A. Golovach, *Giannos Stamoulis*, and Dimitrios M. Thilikos.
An Algorithmic Meta-theorem for graph modification to Planarity and FOL.
ACM Transactions on Computation Theory (TOCT), 14(3-4): 13:1-13:29, 2022.
- (4) Öznur Yaşar Diner, Archontia C. Giannopoulou, *Giannos Stamoulis*, and Dimitrios M. Thilikos.
Block Elimination Distance.
Graphs and Combinatorics (GCOM), 38:133, 2022.
- (5) Alexandros Leivaditis, Alexandros Singh, *Giannos Stamoulis*, Dimitrios M. Thilikos, Konstantinos Tsatsanis, and Vasiliki Velona.
Minor-Obstructions for Apex Sub-unicyclic Graphs.
Discrete Applied Mathematics (DAM), 284: 538 - 555, 2020.
- (6) Alexandros Leivaditis, Alexandros Singh, *Giannos Stamoulis*, Dimitrios M. Thilikos, and Konstantinos Tsatsanis.
Minor-Obstructions for Apex-Pseudoforests.
Discrete Mathematics (DM) 344(10), 112529, 2021.

Papers accepted in international conferences, submitted to journals, but yet not accepted to journals.

- (7) Petr A. Golovach, *Giannos Stamoulis*, and Dimitrios M. Thilikos.
Model-Checking for First-Order Logic with Disjoint Paths Predicates in Proper Minor-Closed Graph Classes.
In Proc. of the 34th ACM-SIAM Symposium on Discrete Algorithms (SODA 2023), pages 3684 - 3699, 2023.
- (8) Fedor V. Fomin, Petr A. Golovach, Tuukka Korhonen, Kirill Simonov, and *Giannos Stamoulis*.
Fixed-Parameter Tractability of Maximum Colored Path and Beyond.
In Proc. of the 34th ACM-SIAM Symposium on Discrete Algorithms (SODA 2023), pages 3700 - 3712, 2023.
- (9) Fedor V. Fomin, Petr A. Golovach, Tuukka Korhonen, Daniel Lokshantov, and *Giannos Stamoulis*.
Shortest Cycles With Monotone Submodular Costs.
In Proc. of the 34th ACM-SIAM Symposium on Discrete Algorithms (SODA 2023), pages 2214 - 2227, 2023.

Manuscripts, so far, not published in journals or conferences.

- (10) Laure Morelle, Ignasi Sau, *Giannos Stamoulis*, and Dimitrios M. Thilikos.
Faster parameterized algorithms for modification problems to minor-closed classes.
arXiv:2210.02167.
- (11) Petr A. Golovach, *Giannos Stamoulis*, and Dimitrios M. Thilikos.
Combing a Linkage in an Annulus.
arXiv:2207.04798. Under review.
- (12) Fedor V. Fomin, Petr A. Golovach, Ignasi Sau, *Giannos Stamoulis*, and Dimitrios M. Thilikos.
Compound logics for modification problems.
arXiv:2111.02755. Under review.
- (13) Ignasi Sau, *Giannos Stamoulis*, and Dimitrios M. Thilikos.
 k -apices of minor-closed graph classes. I. Bounding the obstructions.
arXiv:2103.00882. Under review.
- (14) Ignasi Sau, *Giannos Stamoulis*, and Dimitrios M. Thilikos.
A more accurate view of the Flat Wall Theorem.
arXiv:2102.06463. Under review.
- (15) Petr A. Golovach, Stavros G. Kolliopoulos, *Giannos Stamoulis*, Dimitrios M. Thilikos.
Planar Disjoint Paths in Linear Time.
arXiv:1907.05940.

Papers in international conferences whose later versions have also been accepted to journals.

- (i) Petr A. Golovach, *Giannos Stamoulis*, and Dimitrios M. Thilikos.
Hitting Topological Minor Models in Planar Graphs is Fixed Parameter Tractable.
In Proc. of the 31st ACM-SIAM Symposium on Discrete Algorithms (SODA 2020), pages 931-950, 2020. Corresponding journal version: (1).
- (ii) Ignasi Sau, *Giannos Stamoulis*, and Dimitrios M. Thilikos.
An FPT-algorithm for recognizing k -apices of minor-closed graph classes.
In the Proc. of the 47th International Colloquium on Automata, Languages and Programming (ICALP 2020), LIPIcs, vol. 168, pages 95:1-95:20, 2020.
Corresponding journal version: (2).
- (iii) Fedor V. Fomin, Petr A. Golovach, *Giannos Stamoulis*, and Dimitrios M. Thilikos.
An Algorithmic Meta-theorem for graph modification to Planarity and FOL.
In the Proc. of the 28th Annual European Symposium on Algorithms (ESA 2020), LIPIcs, vol. 173, pages 51:1-51:17.
Corresponding journal version: (3).
- (iv) Öznur Yaşar Diner, Archontia C. Giannopoulou, *Giannos Stamoulis*, and Dimitrios M. Thilikos.
Block Elimination Distance.
In the Proc. of the 47th International Workshop on Graph-Theoretic Concepts in Computer Science (WG 2021), pages 28–38, 2021.
Corresponding journal version: (4).
- (v) Alexandros Leivaditis, Alexandros Singh, *Giannos Stamoulis*, Dimitrios M. Thilikos, Konstantinos Tsatsanis, and Vasiliki Velona.
Minor-Obstructions for Apex Sub-unicyclic Graphs.
European Conference on Combinatorics, Graph Theory and Applications (EuroComb 2019), Acta Mathematica Universitatis Comenianae, volume 88(3), pages 903–910, 2019.
Corresponding journal version: (5).

Participation in conferences and workshops

- 34th ACM-SIAM Symposium on Discrete Algorithms (**SODA 2023**), January 22-25, 2023, Florence, Italy.
- LoGAlg2022: Workshop on Logic, Graphs, and Algorithms, November 21-22, 2022, Montpellier, France.
- 24e Journées Graphes et Algorithmes (**JGA 2022**), November 16-18, 2022, Paris, France.
- 2nd Workshop Complexity and Algorithms (**CoA 2022**), September 26-28, 2022, Paris, France.
- 10th Workshop on Graph Classes, Optimization, and Width Parameters (**GROW 2022**), September 19-22, 2022, Koper, Slovenia.
- 11th International Colloquium on Graph Theory and Combinatorics (**ICGT 2022**), July 04-08, 2022, Montpellier, France.
- 10th Workshop on GRaph Searching, Theory and Applications (**GRASTA 2022**), May 16-20, 2022, Porquerolles, France.
- Advances in Parameterized Graph Algorithms (APGA 2022), May 02-06, 2022, Calp, Spain.
- Directed minors and digraph structure theory, April 04-08, 2022, held online.
- Journées Nationales du GDR IM (JNIM 2022), March 31, 2022, Villeneuve d'Ascq, France.
- Graph Product Structure Theory (21w5235), November 21-26, 2021, Banff, Canada (remote participation).
- 23e Journées Graphes et Algorithmes (**JGA 2021**), November 15-19, 2021, held online.
- Sparsity in Algorithms, Combinatorics and Logic (Dagstuhl Seminar 21391), September 26 - October 1, 2021, Dagstuhl, Germany (remote participation).
- 47th International Workshop on Graph-Theoretic Concepts in Computer Science (**WG 2021**), June 23-25, 2021, held online.
- 22e Journées Graphes et Algorithmes (**JGA 2020**), November 16-18, 2020, held online.
- 28th Annual European Symposium on Algorithms (**ESA 2020**), September 7-9, 2020, held online.

- 47th International Colloquium on Automata, Languages and Programming (**ICALP 2020**), July 8-11, 2020, held online.
- First French-Norwegian Workshop on Algorithms and Combinatorics (**FraNorAC 2019**), September 19-20, 2019, Montpellier, France.

Grants and Scholarships

2013-2017: “A. Papadakis” scholarship for undergraduate studies.

Teaching Experience

As teaching assistant:

- **Informatics I** (undergraduate course)
Department of Mathematics, NKUA, Winter Semester **2019-2020**.
in Greek, 26h
- **Recursion Theory** (graduate course)
Joint course in Inter-Institutional Graduate Program “Algorithms, Logic and Discrete Mathematics” and Graduate Program in Pure Mathematics in the Department of Mathematics, NKUA, Winter Semester **2019-2020**.
in Greek, 12h
- **Graph Theory** (graduate course)
Joint course in Inter-Institutional Graduate Program “Algorithms, Logic and Discrete Mathematics” and Graduate Program in Pure Mathematics in the Department of Mathematics, NKUA, Winter Semester **2019-2020**.
in English, 10h
- **Algorithms and Complexity** (undergraduate course)
Department of Informatics and Telecommunications, NKUA, Spring Semester **2019-2020**.
in Greek, 10h
- **Graph Algorithms** (undergraduate course)
Department of Informatics, Faculty of Science, University of Montpellier, Winter Semester **2020-2021**.
in French, 9h
- **From Combinatorics to Graphs** (undergraduate course)
Department of Informatics, Faculty of Science, University of Montpellier, Spring Semester **2020-2021**.
in French, 26h
- **Modelling and Object Programming I** (undergraduate course)
Department of Informatics, Faculty of Science, University of Montpellier, Spring Semester **2020-2021**.
in French, 15h+15h
- **Logic, Computability, Complexity** (graduate course)
Department of Informatics, Faculty of Science, University of Montpellier, Winter Semester **2021- 2022**.
in French, 18h
- **Algorithms 2** (undergraduate course)
1st year undergraduate course Department of Informatics, Faculty of Science, University of Montpellier, Spring Semester 2021- 2022. *in French, 18h*
- **Computability/Complexity** (undergraduate course)
Department of Informatics, Faculty of Science, University of Montpellier, Spring Semester **2021- 2022**.
in French, 30h
- **Algorithms 1** (undergraduate course)
1st year undergraduate course Department of Informatics, Faculty of Science, University of Montpellier, Winter Semester 2022- 2023. *in French, 15h*

Participation in organizing committees

- 11th International Colloquium on Graph Theory and Combinatorics (**ICGT 2022**), July 04-08, 2022, Montpellier, France.
- 23e Journées Graphes et Algorithmes (**JGA 2021**), November 15-19, 2021, held online.

Journal and conference refereeing

- Conferences:** WG 2019, MFCS 2020, IPEC 2020, STACS 2021, WADS 2021, FCSD 2021, WG 2021, IPEC 2021 (x2), SODA 2021, ESA 2022.
- Journals:** Discrete Mathematics (x2), Journal of Computer and System Sciences (x2), Algorithmica (x2), SIAM Journal on Discrete Mathematics, Theoretical Computer Science (x2).

Other Interests

Classical Saxophone.

- Studies in Classical Saxophone (2009-2018). Diploma awarded with honors and first prize, Athens Conservatoire, Athens, Greece.
- Participation in saxophone masterclasses with A. Zervas, L. Saguiguit, E. Honour, G. Cambell, J. Helton, J. Justeson, B. Romairone, P. Skyftas.
- Former member of the *Athens Conservatoire Saxophone Quartet*.
- Collaborations with the world-renowned concert pianist Svetlana Karpunkina, the *Athens Symphony Youth Orchestra*, the *Orchestra of Contemporary Music of Greek National Radio*, and the *Orchestra of the European University of Cyprus*.
- 2018-2020: Saxophone teacher in various conservatories of Athens.