

Curriculum Vitae

Reza Saei

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Personal Information

Date of Birth: December, 1982.

E-Mail Addresses: reza.saeidivar@ii.uib.no, r.saei.math@hotmail.com.

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Postal Address: Kollbudalen 2, 5124 Bergen, Norway.

Degrees

- Ph.D. from the faculty of mathematics and natural sciences, University of Bergen, Bergen, Norway, May 2015; Algorithmic Graph Theory.
- M.Sc. from the department of mathematics, Azarbaijan Shahid Madani University, Tabriz, Iran, January 2008; Graph Theory and Combinatorics.
- B.Sc. from the faculty of mathematical sciences, University of Tabriz, Tabriz, Iran, September 2005.

Scientific Interests

- Structural graph theory
- Extremal graph theory
- Enumeration of graph objects
- Algorithmic graph theory
- Domination, covering and matching problems

Teaching Experiences

- *Teaching assistant for Discrete structures, Spring 2014*, University of Bergen, Bergen, Norway.
- *Teaching assistant for Complexity Theory, Spring 2012, Spring 2013*, University of Bergen, Bergen, Norway.
- *Teaching assistant for Algorithms, Autumn 2011, Autumn 2012, Autumn 2013, Autumn 2014*, University of Bergen, Bergen, Norway.
- *Lecturer for Mathematics for Computer Sciences I and II, University of Applied Science and Technology, 2008 - 2010*, Tabriz, Iran.
- *Lecturer for Calculus I and II, Payame Noor University, 2008 - 2009*, Tabriz, Iran.

Awards

- Meltzer research fund award in 2013.
- Best Paper Award with Remy Belmonte, Pinar Heggernes and Pim van 't Hof from 18th Annual International Computing and Combinatorics Conference (COCOON 2012).
- Admitted to PhD, Institute for informatics, University of Bergen, Bergen, Norway, 2011.
- Admitted to M.Sc. via countrywide examination, Department of Mathematics, Azarbaijan Shahid Madani University, Tabriz, Iran, 2005.
- Admitted to B.Sc. via countrywide examination, Faculty of mathematical sciences, Tabriz University, Tabriz, Iran, 2001.

Academic Services

- *Fall 2013*: Organizer of the Algorithms Seminar Series, University of Bergen, Norway.
- *Spring 2014*: Member of ICT Research School Organizing Committee, University of Bergen, Norway.

Refereeing for journals and conferences

Journals:

- Utilitas Mathematica
- Discrete Applied Mathematics
- International Journal of Computer Mathematics
- The Australasian Journal of Combinatorics

Conferences:

- 18th Annual International Computing and Combinatorics Conference (COCOON 2012)
- 39th International Colloquium on Automata, Languages and Programming (ICALP 2012)
- European Conference on Combinatorics, Graph Theory and Applications (Eurocomb 2013)
- 9th International Symposium on Parameterized and Exact Computation (IPEC 2014)

Research Visits

- May 2013, one week, hosted by Henning Fernau and Daniel Meister, Trier, Germany.
- November 2013, one week, hosted by Dieter Kratsch, Metz, France.
- February 2014, two weeks, hosted by Erik Jan van Leeuwen, Max Planck institute for informatics, Saarbrücken, Germany.

Publications

Theses:

- t2. Saei R. 2015. *Algorithmic and combinatorial problems on graph classes*. PhD dissertation, University of Bergen.
- t1. Saei R. 2008. *Majority Domination Number in Graphs*. Master dissertation, Azarbaijan Shahid Madani University. (in Persian)

Journal papers:

- j11. Maximal induced matchings in triangle-free graphs,
With: *Manu Basavaraju, Pinar Heggernes, Pim van 't Hof, and Yngve Villanger*,
Journal of Graph Theory (2015), doi: 10.1002/jgt.21994.
- j10. Computing the metric dimension for chain graphs,
With: *Henning Fernau, Pinar Heggernes, Pim van 't Hof, Daniel Meister*,
Information Processing Letters **115(9)** (2015), 671 – 676.
- j9. Finding Disjoint Paths in Split Graphs,
With: *Pinar Heggernes, Pim van 't Hof, and Erik Jan van Leeuwen*,
Theory of Computing Systems **57(1)** (2015), 140 – 159.
- j8. Graph classes and Ramsey numbers,
With: *Remy Belmonte, Pinar Heggernes, Pim van 't Hof, and Arash Rafiey*,
Discrete Applied Mathematics **173** (2014), 16 – 27.
- j7. Subset feedback vertex sets in chordal graphs,
With: *Petr Golovach, Pinar Heggernes, and Dieter Kratsch*,
Journal of Discrete Algorithms **26** (2014), 7 – 15.
- j6. Signed edge k-subdomination numbers in graphs,
With: *A. Khodkar, and S.M. Sheikholeslami*,
Ars Combinatoria **109** (2013), 129 – 141.
- j5. Minus edge k-subdomination numbers in graphs,
With: *A.N. Ghameshlou, and S.M. Sheikholeslami*,
AKCE International Journal of Graphs and Combinatorics **8** (2011), 1 – 11.
- j4. Signed (b,k)-matchings in graphs,
With: *A.N. Ghameshlou, S.M. Sheikholeslami, and L. Volkmann*,
An. Șt. Univ. Ovidius Constanța **18** (2010), 127 – 138.
- j3. Signed (b,k)-edge covers in graphs,
With: *A.N. Ghameshlou, A. Khodkar, and S.M. Sheikholeslami*,
Intelligent Information Management **2** (2010), 143 – 148.
- j2. Negative k-subdecision numbers in graphs,
With: *A.N. Ghameshlou, A. Khodkar, and S.M. Sheikholeslami*,
AKCE International Journal of Graphs and Combinatorics **6** (2009), 361 – 371.
- j1. Signed star k-subdomination numbers in graphs,
With: *S.M. Sheikholeslami*,
Discrete Applied Mathematics **156** (2008), 3066 – 3070.

Conference papers:

c4. Maximal induced matchings in triangle-free graphs.

With: *Manu Basavaraju, Pinar Heggernes, Pim van 't Hof, and Yngve Villanger*, WG 2014, LNCS 8747: 93 – 104, Springer.

c3. Finding Disjoint Paths in Split Graphs,

With: *Pinar Heggernes, Pim van 't Hof, and Erik Jan van Leeuwen*, SOFSEM 2014, LNCS 8327: 315 – 326, Springer.

c2. An exact algorithm for Subset Feedback Vertex Set on chordal graphs,

With: *Petr Golovach, Pinar Heggernes, and Dieter Kratsch*, IPEC 2012, LNCS 7535: 85 – 96, Springer.

c1. Ramsey numbers for line graphs and perfect graphs,

With: *Remy Belmonte, Pinar Heggernes, and Pim van 't Hof*, COCOON 2012, (Best Paper Award), LNCS 7434: 204 – 215, Springer.

Other papers:

o1. Maximal induced matchings in triangle-free graphs.

With: *Manu Basavaraju, Pinar Heggernes, Pim van 't Hof, and Yngve Villanger*, Arxiv: CoRR abs/1312.5180 (2013).

Submitted Journal Papers:

s1. Covering the edges of bipartite graphs by cycles of length 4,

With: *Henning Fernau, Pinar Heggernes, and Daniel Meister*.

Given Talks

• Algorithmic and combinatorial problems on graph classes,

Presentation of Ph.D. thesis, University of Bergen, Norway, 29 May 2015.

• Graph spectra,

PhD trial lecture, Algorithms Research Group, University of Bergen, Norway, 24 April 2015.

• Maximal induced matchings in triangle-free graphs,

Max Planck Institute for Informatics, Saarbrücken, Germany, 10 February 2015.

• Reconfiguration Graphs and Problems,

Seminar on self-selected topics, Institute for Informatics, University of Bergen, Norway, 05 September 2014.

- Maximal induced matchings in triangle-free graphs,
40th International Workshop on Graph-Theoretic Concepts in Computer Science (WG 2014),
25 – 27 June 2014, Le Domaine de Chals, near Orlans, France.
- Finding Disjoint Paths in Split Graphs,
Algorithms Seminar Series, Institute for Informatics, University of Bergen, Norway, 07 February 2014.
- Finding Disjoint Paths in Split Graphs,
40th International Conference on Current Trends in Theory and Practice of Computer Science (SOFSEM 2014), 25 – 30 January 2014, High Tatras, Slovakia.
- Ramsey numbers for line graphs and perfect graphs,
Algorithms Seminar Series, Institute for Informatics, University of Bergen, Norway, 16 November 2012.
- An exact algorithm for Subset Feedback Vertex Set on chordal graphs,
7th International Symposium on Parameterized and Exact Computation (IPEC 2012), 12 – 14 September 2012, Ljubljana, Slovenia.
- Packing Cycles through Prescribed Vertices,
Spring School of Combinatorics 2012, 14 – 22 April 2012, Borova Lada, Czech Republic.
- Polynomial Algorithm for Recognizing Perfect Graphs,
10th Annual Winter School in Algorithms, Graph Theory and Combinatorics, 20 – 22 February 2012, Finse, Norway.
- Some Topics on Domination,
Algorithms Seminar Series, Institute for Informatics, University of Bergen, Norway, 17 June 2011.

Participation in Conferences, Workshops and Schools

- *13th Annual Winter School in Algorithms, Graph Theory and Combinatorics*,
16 – 18 February 2015, Ustaoset, Norway.
- *40th International Workshop on Graph-Theoretic Concepts in Computer Science (WG 2014)*,
25 – 27 June 2014, Le Domaine de Chals, near Orlans, France.
- *12th Annual Winter School in Algorithms, Graph Theory and Combinatorics*,
19 – 21 March 2014, Finse, Norway.
- *40th International Conference on Current Trends in Theory and Practice of Computer Science (SOFSEM 2014)*,
25 – 30 January 2014, High Tatras, Slovakia.

- *11th Nordic Combinatorial Conference (NORCOM 2013)*,
17 – 19 June 2013, Stockholm, Sweden.
- *11th Annual Winter School in Algorithms, Graph Theory and Combinatorics*,
20 – 22 February 2012, Ustaoset, Norway.
- *7th International Symposium on Parameterized and Exact Computation (IPEC 2012)*,
12 – 14 September 2012, Ljubljana, Slovenia.
- *Spring School of Combinatorics 2012*,
14 – 22 April 2012, Borova Lada, Czech Republic.
- *10th Annual Winter School in Algorithms, Graph Theory and Combinatorics*,
22 – 24 February 2012, Finse, Norway.
- *Autumn School on Computational Creativity 2011*,
7 – 11 November 2011, Porvoo, Finland.
- *Treewidth Workshop 2011*,
19 – 20 May 2011, University of Bergen, Bergen, Norway.
- *38th Annual Iranian Mathematics Conference (AIMC38)*,
3 – 6 September 2007, Zanjan University, Zanjan, Iran.
- *37th Annual Iranian Mathematics Conference (AIMC37)*,
2 – 5 September 2006, Azarbijan University of Tarbiat Moallem, Tabriz, Iran.

Language Skills

English	<i>Upper intermediate level in Written and Spoken English</i>
Persian	<i>Fluent</i>
Turkish	<i>Fluent</i>
Azerbaijani	<i>Fluent (Native)</i>
Norwegian	<i>Upper elementary level</i>

References

Prof. Pinar Heggernes (advisor of my PhD)

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University of Bergen
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Email: pinar@ii.uib.no*

Prof. Jan Arne Telle (co-advisor of my PhD)

*Institute for informatics
University of Bergen
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Prof. Trond Steihaug (I was his teaching assistant)

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