

C.V.

Home address: P.O. Box 2121, Kedumim 44856 ISRAEL
Telephone: +972-58-5405401
Email: gnivasch@yahoo.com
Birth: 1980, Caracas, Venezuela

Research Area: Computational and Combinatorial Geometry.

CURRENT AFFILIATION

2012- Lecturer, Department of Computer Science and Mathematics, Ariel University,
Ariel, Israel

PAST POSITIONS

2011-2012 Post-doctoral researcher, Mathematics Department, EPFL, Lausanne, Switzerland
2009-2011 Post-doctoral researcher, Institute of Theoretical Computer Science
ETH Zürich

EDUCATION

2005-2009 Ph.D. in Computer Science
Tel-Aviv University
Thesis topic: Weak epsilon-nets, Davenport-Schinzel sequences, and related
problems
Advisor: Prof. Micha Sharir
2002-2004 M.Sc. in Computer Science and Applied Mathematics
Weizmann Institute of Science
Thesis: The Sprague-Grundy function for Wythoff's game: On the location of
the g-values
Advisor: Prof. Aviezri S. Fraenkel
1996-2000 B.A. in Computer Science, Cum Laude
Yeshiva University, New York.

TEACHING

Spring 2013 *Linear Algebra 1, Linear Algebra 2, Calculus 2*, Ariel University
Fall 2012 *Linear Algebra 1*, Ariel University
Spring 2012 *Discrete Optimization* (over 100 students), EPFL Lausanne

- Fall 2011 Teaching Assistant for *Linear Algebra* and *Analysis III*, EPFL Lausanne
- Spring 2011 *Discrete Geometry*, ETH Zürich
- Fall 2010 *Computational Geometry* (in conjunction with B. Gärtner and M. Hoffmann), ETH Zürich
- Spring 2010 Teaching Assistant for *Metric Embeddings*, ETH Zürich
- 2005-2009 Teaching Assistant for *Discrete Mathematics* and for *Data Structures*, Tel Aviv University
- 2006-2009 Grader for *Scientific Writing*, Tel Aviv University
- 2005-2006 Private tutor for eTeacher Corp. in mathematics and computer science for high school and college students
- 2003-2004 Private lessons in mathematics for high school and college students

PROFESSIONAL SERVICE

- 2011 Program Committee, EuroCG 2011, Morschach, Switzerland

WORK EXPERIENCE

- 2001 Freelance programmer for Davka Corp.

AWARDS

- 2009 Deutsch prize for excellence in research, Blavatnik School of Computer Science, Tel Aviv University
- 2009 SODA 2009 Best Student Paper Award
- 2008-2009 Excellence scholarship, Raymond and Beverly Sackler Faculty of Exact Sciences, Tel Aviv University
- 2000 Jacob David Cohen Memorial Award, Yeshiva University
- 2000 Joseph Gunner Memorial Award, Yeshiva University
- 1996 Silver Medal, 21st CENAMEC Venezuelan Mathematical Olympiad

PUBLICATIONS

1. Gabriel Nivasch
Cycle detection using a stack
Information Processing Letters, vol. 90:3, 135-140 (2004).
2. Gabriel Nivasch and Eyal Lev
Non-attacking queens on a triangle
Mathematics Magazine, vol. 78:5, 399-403 (2005).
3. Gabriel Nivasch
The Sprague-Grundy function of the game Euclid
Discrete Mathematics, vol. 306:21, 2798-2800 (2006).
4. Gabriel Nivasch
More on the Sprague-Grundy function for Wythoff's game
In M. H. Albert and R. J. Nowakowski, editors, *Games of No Chance 3*, vol. 56 of *MSRI Publications*, pp. 377-410, Cambridge University Press (2009).
5. Gabriel Nivasch
An improved, simple construction of many halving edges
In J. E. Goodman et al., editors, *Surveys on Discrete and Computational Geometry: Twenty Years Later*, vol. 453 of *Contemporary Mathematics*, pp. 299-305, AMS (2008).
6. Noga Alon, Haim Kaplan, Gabriel Nivasch, Micha Sharir, and Shakhar Smorodinsky
Weak epsilon-nets and interval chains
19th ACM-SIAM Symp. on Discrete Algorithms (SODA 2008),
Journal of the ACM, vol. 55, article 28, 32 pages (2008).
7. Gabriel Nivasch and Micha Sharir
Eppstein's bound on intersecting triangles revisited
Journal of Combinatorial Theory, Series A, vol. 116:2, 494-497 (2009).
8. Boris Bukh, Jiří Matoušek, and Gabriel Nivasch
Stabbing simplices by points and flats
Discrete and Computational Geometry, vol. 43:2, pp. 321-338 (2010).
9. Gabriel Nivasch
Improved bounds and new techniques for Davenport-Schinzel sequences and their generalizations
20th ACM-SIAM Symp. on Discrete Algorithms (SODA 2009) – best student paper,
Journal of the ACM, vol. 57, article 17, 44 pages (2010).
10. Boris Bukh, Jiří Matoušek, and Gabriel Nivasch
Lower bounds for weak epsilon-nets and stair-convexity
25th ACM Symp. on Computational Geometry (SoCG 2009),
Israel Journal of Mathematics, vol. 182, pp. 199-228 (2011).

11. Boris Bukh and Gabriel Nivasch
Upper bounds for centerlines
Journal of Computational Geometry, vol. 3, pp. 20-30 (2012).
12. Gabriel Nivasch, János Pach, Rom Pinchasi, and Shira Zerbib
The number of distinct distances from a vertex of a convex polygon
Journal of Computational Geometry, vol. 4, pp. 1-12, 2013.
13. Gabriel Nivasch, János Pach, and Gábor Tardos
The visible perimeter of an arrangement of disks
Graph Drawing 2012 (*Lecture Notes in Computer Science*, vol. 7704, pp. 364-375, 2013),
To appear in *Computational Geometry: Theory and Applications*.
14. Boris Bukh, Po-Shen Loh, and Gabriel Nivasch
One-sided epsilon-approximants
In preparation.