

CURRICULUM VITAE

Dr. Benjamin Mounits

December, 2012

ORT Braude College, Department of Software Engineering,
P.O. Box 78, Karmiel 2161002, Israel
Telephone: +972-4-990-1754
Email: mounits@braude.ac.il

EDUCATION

- Ph.D. 2006, Applied Mathematics. Department of Applied Mathematics, The Technion – Israel Institute of Technology, Haifa, Israel
- M.Sc. 2002, Applied Mathematics. Department of Applied Mathematics, The Technion – Israel Institute of Technology, Haifa, Israel
- B.Sc. 1996, Mathematics and Physics, Department of Mathematics and Physics, University of Haifa at Oranim, Qiryat-Tivon, Israel

RESEARCH INTERESTS

- Coding Theory
- Applications of Discrete Mathematics to Problems in Computer Science and Information Theory
- Optimization

ACADEMIC APPOINTMENTS

- 2008 – present Lecturer, ORT Braude College, Department of Software Engineering
- 2006 – 2008 Scientific Staff Member (postdoctoral position), Department PNA1 (Algorithms, Combinatorics and Optimization), CWI - the national research institute for mathematics and computer science, Amsterdam, The Netherlands.
- 1999 – 2006 Teaching Assistant, Department of Mathematics, The Technion – Israel Institute of Technology, Haifa, Israel

TEACHING EXPERIENCE

ORT Braude College of Engineering:

Graduate Courses:

Software Engineering:

Advanced Topics in Coding Theory
Approximation Theory

Undergraduate Courses:

Discrete Mathematics 1
Algorithms in Graph Theory
Information Theory
Coding Theory

The Technion–Israel Institute of Technology

Undergraduate Courses:

Differential and Integral Calculus 1
Differential and Integral Calculus 2
Multivariable Calculus

ACADEMIC AND PROFESSIONAL AWARDS AND GRANTS

1999 - 2006 Merit-based tuition plus full stipend scholarship, Technion–Israel Institute of Technology, Haifa, Israel

2004 Distinguished teaching assistant at the Math department, Technion–Israel Institute of Technology, Haifa, Israel

2001 The Gutwirth Prize for excellence in Graduate Research, Technion–Israel Institute of Technology, Haifa, Israel

PROFESSIONAL ACTIVITIES

Referee of papers for publication in the following journals:

- Discrete Mathematics
- IEEE Transactions on Information Theory
- Journal of Combinatorial Theory, Series A
- Advances in Mathematics of Communications

LIST OF PUBLICATIONS

Refereed Papers

1. B. Mounits, Lower Bounds on the Minimum Average Distance of Binary Codes, *Discrete Mathematics*, vol. 308, issue 24 (December 2008), pp. 6241-6253.

2. B. Mounits, T. Etzion and S. Litsyn, Upper Bounds on Codes via Association Schemes and Linear Programming, *Advances in Mathematics of Communications*, vol. 1, no. 2 (May 2007), pp. 173-195.
3. S. Litsyn and B. Mounits, Improved Lower Bounds on Sizes of Single-Error Correcting Codes, *Designs, Codes and Cryptography*, vol. 42, no. 1 (January 2007), pp. 67-72.
4. T. Etzion and B. Mounits, Quasi-Perfect Codes with Small Distance, *IEEE Trans. on Inform. Theory*, vol. 51 (November 2005), pp. 3938-3946.
5. B. Mounits, T. Etzion and S. Litsyn, Improved Upper Bounds on Sizes of Codes, *IEEE Trans. on Inform. Theory*, vol. 48 (April 2002), pp. 880-886.

Conference Proceedings and Abstracts

1. B. Mounits, New Upper Bounds for Nonbinary Codes, Proceedings of IEEE 26th Convention of Electrical and Electronics Engineers in Israel (IEEEI), 2010, Eilat, Israel, November 2010, pp. 997-1001.
2. B. Mounits, Upper Bounds on Codes, Proceedings of Combinatorics 2010, Verbania, Italy, June 2010, p. 181.
3. B. Mounits, Lower bounds on the minimum average distance of binary codes, Proceedings of Combinatorics 2008, Costermano, Italy, June 2008, p. 269.
4. B. Mounits, T. Etzion and S. Litsyn, New Upper Bounds on $A(n,d)$, Proceedings of ISIT 2005, Adelaide, Australia, September 2005, pp. 921-925.
5. T. Etzion and B. Mounits, Quasi-Perfect Codes with Small Distance, Proceedings of ISIT 2004, Chicago, USA, June 2004, page 453
6. B. Mounits, T. Etzion and S. Litsyn, Improvement on the Johnson Upper Bound for Error-Correcting Codes, Proceedings of ISIT 2002, Lausanne, Switzerland, July 2002, page 345.