

## CURRICULUM VITAE - EMANUEL MILMAN

Date and place of Birth: January 12, 1977, Israel.

Nationality: Israeli.

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### Positions

*Sep 2008 - Jun 2009* : Post-Doctoral member at the Institute for Advanced Study, Princeton.

*Jun 2008 - Aug 2008* : Researcher at the Technion, Haifa.

*Sep 2007 - May 2008* : Post-Doctoral member at the Institute for Advanced Study, Princeton.

### Education

*Oct 2003 - Aug 2007* : The Weizmann Institute of Science, Israel.

Ph.D., Pure Mathematics.

Supervisor: Prof. Gideon Schechtman.

Thesis: *On the Distribution of Volume in Convex Bodies*.

*Oct 1996 - Oct 2000* : Tel-Aviv University, Israel.

M.Sc. Summa Cum Laude, Pure Mathematics.

Supervisor: Prof. Ehud Lehrer.

Thesis: *Uniform Properties of Stochastic Games and Approachability*.

Grade point average: 99.

*Oct 1993 - Oct 1996* : Tel-Aviv University, Israel.

B.Sc. Summa Cum Laude, Mathematics and Computer-Science.

Grade point average: 98.

Employment

*Oct 2001 - Nov 2004* : ioIMAGE (Intelligent Video Appliances Start-Up)

Head of Algorithms, later Head of Special Projects.

Created company's main core-technology. Invented and implemented numerous image-processing, statistical-analysis and learning algorithms.

*Mar 1995 - Jul 2000* : Israel Defense Force (IDF)

Senior Academic Officer in the Intelligence Corp.

Conferences Organized

*Oct 2009*, Boca Raton. AMS Sectional Meeting co-organized with C. Houdré and M. Milman. Special session on "Concentration, Functional Inequalities, and Isoperimetry".

Awards

*2007* The Gad Resheff Memorial Prize.

*2007* Fulbright Post-Doctoral Scholar Award (declined).

*2007* The Dr. Otto Schwarz Graduate Scholarship Fund Award.

*2006* Dean's list (top 3%) at the Weizmann Institute of Science.

*2000* Awarded personal and team prizes for work in the IDF, including commendation for part in the Israel National Security Award.

*1995-1998* Granted position of IDF Outstanding Student.

*1995* Rector's list (top 0.1%) at Tel-Aviv University.

*1994-1999* Dean of Exact Sciences list at Tel-Aviv University.

*1994-1997* Received 4-year scholarship from Tel-Aviv University under the "Uni-Discipline Program for Distinguished Students".

*1993* Shie Bleiman Award for highschool's final project in technology.

Invited Talks

*Oct 2008*, City University of New York. Probability Seminar.

*Aug 2008*, Weizmann Institute. Geometric Functional Analysis and Probability Seminar.

*Jun 2008*, Sevilla. Fourth annual conference on "Phenomena in High Dimensions".

*Jun 2008*, Technion. Colloquium.

*May 2008*, CIRM, Luminy. Fifth Conference on "Probability in High Dimensions".

*May 2008*, Case-Western Reserve University. Colloquium.

May 2008, Ohio-State University. PDE Seminar.  
 Apr 2008, Courant Institute. Differential Geometry and Topology Seminar.  
 Mar 2008, University of Missouri. Conference on “Asymptotic Convex Geometry”.  
 Feb 2008, MIT. PDE Seminar.  
 Nov 2007, Polytechnic University. Colloquium.  
 Nov 2007, AIM. Workshop on “Algorithmic Convex Geometry”.  
 Sep 2007, Fields Institute, Ottawa. Workshop on “Geometrization of Probability”.  
 Aug 2007, AIM. Workshop on “Fourier Analytic Methods in Convex Geometry”.  
 Jun 2007, Samos. Third annual conference on “Phenomena in High Dimensions”.  
 Jun 2007, Cortona. Educational Workshop on “Convex Geometry - Analytic aspects”.  
 May 2007, Ben-Gurion University. Israel Mathematical Union annual meeting.  
 Apr 2007, Tel-Aviv University. Geometric and Functional Analysis Seminar.  
 Sep 2006, Freudenstadt. Educational workshop on “Convexity and Probability”.  
 Jun 2006, IHP, Paris. Second annual conference on “Phenomena in High Dimensions”.  
 Apr 2006, Weizmann Institute. Geometric Functional Analysis and Probability Seminar.  
 Jul 2005, TU Vienna. First annual conference on “Phenomena in High Dimensions”.  
 Jun 2002, Hebrew University. Game Theory and Mathematical Economics Seminar.

#### Refereeing

Geometric and Functional Analysis, Advances In Mathematics, Journal of Functional Analysis, Mathematische Annalen, Transactions of the AMS, Annales de l’institut Henri Poincaré (B), Studia Mathematica, Israel Journal of Mathematics, GAFA seminar notes.

#### Academic Interests

Asymptotic Convex and Geometric Analysis, classical Convex Geometry, interplay between geometry and spectral properties of Riemannian manifolds, geometry of isoperimetric minimizing surfaces, Geometric Measure Theory, isoperimetric, functional and concentration inequalities, diffusion semi-group and heat-kernel estimates in convex manifolds, optimal transportation for the Monge-Ampère equation, distribution of volume in convex bodies, “local theory” of Banach Spaces, convexity in graphs, metric entropy and covering numbers, empirical processes, general phenomena in high dimensions, Sobolev spaces, Radon transforms and Harmonic Analysis on Grassmann manifolds.

#### List of Publications

on separate page (links to electronic versions available at [www.math.ias.edu/~emilman](http://www.math.ias.edu/~emilman)).