

Chen Sagiv

PERSONAL

Place of birth: Israel

e-mail: chen@sagivtech.com

EDUCATION

PhD in Applied Mathematics

1999-2006 Tel Aviv University Tel Aviv, Israel

Texture segmentation, non-linear diffusion, group theory, Gabor wavelets.

PhD advisors were Nir Sochen from the Tel Aviv University and Yehoshua Y. Zeevi from the Technion.

MSc. in Physics (cum laude)

1991-1996 Tel Aviv University Tel Aviv, Israel

Research included evaluation of amniotic fluid volume from ultrasound images using a semi-automatic boundary detection algorithm.

MSc. advisor was Solange Akselrod from the Tel Aviv University.

BSc. in Physics and Mathematics

1987-1990 Tel Aviv University Tel Aviv, Israel

EXPERIENCE

SagivTech Ltd.

2007 – Present

Co-Founder and co-CEO. *Software and algorithms development in the fields of Image processing, Computer Vision, Deep Learning and Parallel Computing.*

Technion Research & Development Foundation

2007 – 2013

Researcher *in a research group at the Electrical Engineering department.*

Dblur Technologies Herzliya, Israel

2006 – 2007

Image Processing Specialist

University of Bremen Bremen, Germany

2005 –2006

Postdoc-Fellow *at the industrial mathematics department at the university of Bremen.*

Technion & Tel Aviv University Israel

1999–2005

Teaching Assistant and Lecturer

DSP Group Herzliya, Israel

1996–1999

Software Support Manager

Medivision Amsterdam, The Netherlands

1994–1996

Application Engineer

Resource Analysis Delft, The Netherlands

1994

SW Engineer

I.G.P. Rehovot, Israel

1992-1993

Algorithms and SW Engineer

Hi-G-Tek Or-Yehuda, Israel

1991

Project Engineer

MILITARY SERVICE

August 1984 – September 1986

Sergeant in the adjutancy force.

COMMUNITY SERVICE

2014-2015 Volunteered as Supervisor of students project in Metro West high school

2016- Volunteers as Math teacher at the Yuvalim boarding school for youth at risk.

List of Publications

1. Amir Egozi, Dov Eilot, Peter Maass, Chen Sagiv

A Robust Estimation Method for Camera Calibration with Known Rotation, *Applied Mathematics*, 6, 1538-1552, 2015.

2. Peter Maass, Chen Sagiv, Hans-Georg Stark, Bruno Torresani, Signal representation, uncertainty principles and localization measures, *Advances in Computational Mathematics*, 40, 3, pp 597–607, 2014.

3. Jan Hendrik Kobarg, Peter Maass, Janina Oetjen, Oren Tropp, Eyal Hirsch, Chen Sagiv, Mohammad Golbabaee, Pierre Vandergheynst, Numerical experiments with MALDI Imaging data, *Advances in Computational Mathematics*, 40, 3, pp 667–682, 2014.

4. Eli Appleboim, Yedidya Hyams, Shai Krakovski, Chen Sagiv, Emil Saucan, The Scale-Curvature Connection and its Application to Texture Segmentation, *Theory and Applications of Mathematics & Computer Science*, 3, 1, 2013.

5. Dennis Trede, Theodore Alexandrov, Chen Sagiv, Peter Maass, Magnification of Label Maps With a Topology-Preserving Level-Set Method, *IEEE Transactions on Image Processing*, 21, 9, 2012.

6. Nikolay Skarbnik, Chen Sagiv, and Yehoshua Y. Zeevi, Edges Detection and, Image Skeletons Generated by Quantized Localized Phase, *Eusipco 2009*.

7. Emil Saucan, Chen Sagiv and Eli Appleboim, Geometric Wavelets for Image Processing: Metric Curvature of Wavelets, *SampTA 2009*.

8. Y. Ferdman, C. Sagiv and N. Sochen, Full 2D Affine Gabor System with Perceptually Tight Frame, submitted 2007.

9. Y. Ferdman, C. Sagiv and N. Sochen, Gabor-Morlet Filter Bank Generated by the Full Affine Group, submitted 2007.

10. P. Maass, C. Sagiv, H.G. Starck and N. Sochen, Do Uncertainty Minimizers Attain Minimal Uncertainty *Journal of Fourier Analysis & Applications*, 2009.

11. Y. Ferdman, C. Sagiv and N. Sochen, , Full Affine Wavelets are Scale-Space with a twist, *Proceedings of SSVM, LNCS 4485/2008*, 1-12, 2008.

12. S. Dahlke, G. Kutyniok, P. Maass, C. Sagiv, H.-G. Stark, and G. Teschke. The Uncertainty Principle Associated with the Continuous Shearlet Transform. *Int. J. Wavelets Multiresolut. Inf. Process.*, 2008.

13. C. Sagiv, D. Lorenz, S. Dahlke and P. Maass, The Canonical Coherent States

associated with Quotients of the Affine Weyl-Heisenberg Group *Journal of Applied Functional Analysis*, 3(2), 215-232, 2008.

14. C. Sagiv, N. Sochen and Y.Y. Zeevi, Two-Dimensional Affine Frames for Image Analysis and Synthesis, *Applied and Computational Harmonic Analysis*, 24(2), 174-194, 2006.

15. C. Sagiv, N. Sochen and Y.Y. Zeevi, The Uncertainty Principle: Group Theoretic Approach, Possible Minimizers and Scale-Space Properties, *Journal of Mathematical Imaging and Vision*, 26(1-2), 149-166, 2006.

16. C. Sagiv, N. Sochen and Y.Y. Zeevi, Integrated Active Contours for Texture Segmentation, *IEEE Transactions on Image Processing*, 15(6), 1633-1646, 2006.

17. C. Sagiv, N. Sochen and Y.Y. Zeevi, Scale-Space Generation via Uncertainty Principles, *Proceedings of Scale Space, LNCS 3459/2005*, 351-362, 2005.

18. N. Sochen, C. Sagiv and R. Kimmel, Stereographic Combing a Porcupine or studies on Orientation Diffusion. *SIAM Journal of Applied Mathematics*, 64(5), 1477-1508, 2004.

19. C. Sagiv, N. A. Sochen, and Y. Y. Zeevi. Texture segmentation via a diffusion segmentation scheme in the gabor feature space, *Proc. Texture 2002, Copenhagen, June 2002*.

20. C. Sagiv, N. Sochen and Y.Y. Zeevi, Gabor Features Diffusion via the Minimal Weighted Area Method, *Proceedings of EMMCVPR*, 621-635, 2001.

21. C. Sagiv, N. Sochen and Y.Y. Zeevi, Geodesic Active Contours Applied to Texture Feature Space, *Proceedings of Scale Space*, 344-352, 2001.

22. C. Sagiv, N. Sochen and Y.Y. Zeevi, Gabor Space Geodesic Active Contours, *Proceedings of AFPAC, LNCS 1888/2000*, 309-318, 2000.

23. C. Sagiv, S. Akselrod and R. Tepper, Application of a semiautomatic boundary detection algorithm for the assessment of amniotic fluid quantity from ultrasound images, *Ultrasound in Medicine and Biology*, 25(4), 515-526, 1999.

24. J. Karin, M. Hirsch, C. Sagiv and S. Akselrod, Fetal autonomic nervous system activity monitoring by spectral analysis of heart rate variations, *Proceedings of Computers in Cardiology*, 479-482, 1992.