

# Evgeniy Bart

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## EDUCATION

**Weizmann Institute**, Rehovot, Israel

Ph.D., *Computer Science*, May 2005

Advisor: Shimon Ullman

Thesis: “Object recognition and classification with limited training data”

M.Sc., *Computer Science*, November 2003

Advisor: Shimon Ullman

Thesis: “Object recognition and classification using shared extended fragments”

**Tel Aviv University**, Tel Aviv, Israel

B.Sc., *Physics and Computer Science*, magna cum laude, August 1999

**University of Minnesota**, Minneapolis, MN

*Teaching in Higher Education*, Fall 2006

A segment of the *Preparing Future Faculty* program designed to introduce modern teaching techniques and improve teaching skills of new faculty

## RESEARCH EXPERIENCE

**Caltech**, Pasadena, CA

**UC Irvine**, Irvine, CA

October 2006 – present

*Postdoctoral Associate*

Carry out research on learning taxonomies of visual categories.

Supervisors: Prof. Pietro Perona and Prof. Max Welling

**Univ. Minnesota**, Minneapolis, MN

January 2008 – present

*Consultant*

Consult on using computer vision techniques to model human vision.

Supervisor: Prof. Dan Kersten

**IMA, Univ. Minnesota**, Minneapolis, MN      Sept. 2005 – October 2006

*Postdoctoral Associate*

Carried out independent research and participated in the Imaging annual program.

Supervisor: Prof. Dan Kersten

**CSAIL, MIT**, Cambridge, MA      June 2005 – August 2005

*Postdoctoral Associate*

Carried out research on super-resolution and related problems.

Supervisor: Prof. Bill Freeman

### **SOFTWARE ENGINEERING EXPERIENCE**

**I-Logix**, Rehovot, Israel      April 2000 – January 2002

*Software engineer, Rhapsody core group*

Designed and developed software for visual modeling based on UML.

Supervisor: Dr. Yachin Pnueli

**Tecnomatix**, Hertzeliya, Israel      October 1998 – April 2000

*Programmer, ROBCAD division*

Developed software for computer-aided manufacturing process engineering (CAPE).

Supervisor: Mr. David Heled

### **TEACHING EXPERIENCE**

**Univ. Minnesota**, Minneapolis, MN      Spring, 2005

*Instructor*

Co-instructor in “Object Recognition: Computation & Neuroimaging”.

**Tel Aviv University**, Tel Aviv, Israel      Fall and Spring, 1998

*Grader*

Graded in undergraduate physics courses.

**Tel Aviv University**, Tel Aviv, Israel      Summer and Fall, 1997

*Instructor*

Taught math and physics to groups of freshmen and high-school science students.

### **REFERENCES**

Available upon request.

## PUBLICATIONS

- [1] Ian Porteous, Evgeniy Bart, and Max Welling. Multi-hdp: A non parametric bayesian model for tensor factorization. In *AAAI Conference on Artificial Intelligence*, 2008.
- [2] Jay Hegde, Evgeniy Bart, and Daniel Kersten. Fragment-based learning of visual object categories. *Current Biology*, 18(8):597–601, 2008.
- [3] Evgeniy Bart, Ian Porteous, Pietro Perona, and Max Welling. Unsupervised learning of visual taxonomies. In *CVPR*, 2008.
- [4] Evgeniy Bart and Shimon Ullman. Class-based feature matching across unrestricted transformations. *PAMI*, 2008.
- [5] Max Welling, Ian Porteous, and Evgeniy Bart. Infinite state bayes-nets for structured domains. In *NIPS*, 2007.
- [6] Evgeniy Bart and Shimon Ullman. Object recognition by eliminating distracting information. In *Proceedings of the International Conference on Computer Vision and Graphics*, 2006.
- [7] Evgeniy Bart and Shimon Ullman. Cross-generalization: learning novel classes from a single example by feature replacement. In *CVPR*, 2005.
- [8] Evgeniy Bart and Shimon Ullman. Single-example learning of novel classes using representation by similarity. In *BMVC*, 2005.
- [9] E. Bart, S. Bao, and D. Holcman. Modeling the spontaneous activity of the auditory cortex. *J. Computational Neuroscience*, 19(3):357–378, 2005.
- [10] Evgeniy Bart and Shimon Ullman. Image normalization by mutual information. In *BMVC*, pages 327–336, 2004.
- [11] Evgeniy Bart and Shimon Ullman. Class-based matching of object parts. In *Proceedings of CVPR Workshop on Image and Video Registration*, 2004.
- [12] Shimon Ullman and Evgeniy Bart. Recognition invariance obtained by extended and invariant features. *Neural Networks*, 17:833–848, 2004.
- [13] Evgeniy Bart, Evgeny Byvatov, and Shimon Ullman. View-invariant recognition using corresponding object fragments. In *ECCV*, pages 152–165, 2004.