Iasonas Kokkinos   Curriculum Vitae

Contact

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Education

- **Ph.D., Electrical and Computer Engineering**, 2006
  National Technical University of Athens.
  Advisor: Prof. Petros Maragos.
  Ph.D. Dissertation Title: *"Synergy between Image Segmentation and Object Recognition using Geometrical and Statistical Computer Vision Techniques."*

- **M. Eng. Diploma, Electrical and Computer Engineering**, 2001
  National Technical University of Athens.
  M. Eng. Dipl. Thesis Title: *"Modeling and Prediction of Speech Signals using Chaotic Time-Series Analysis Techniques."* GPA: 9.34/10.

Research Interests

Statistical Models for Object Detection & Recognition.

Probabilistic Inference with Graphical Models.

Feature Extraction and Interest Point Detection.

Texture Analysis and Segmentation.

Appointments

-	9/2008 - present	Assistant Professor	ECP, Dept. of Applied Mathematics
-	9/2008 - present	Affiliate Researcher	Galen Group, INRIA-Saclay
-	6/2006 - 8/2008	Postdoctoral Research Scholar	UCLA, Dept. of Statistics
-	11/2001- 6/2006	Graduate Research Assistant	NTUA, School of ECE
-	3/2002 - 7/2002	Visiting Graduate Student	INRIA, Sophia Antipolis

Distinctions and Awards

- Paris Kanellakis award for highest ranking student in CS major.

- Obtained in 4 years the 5-year NTUA M. Eng. Degree, ranking in the top 2%.

- Bodossaki Foundation Scholarship as a graduate student.

- National Scholarship Foundation award as an undregraduate based on academic achievement.

- Outstanding Reviewer award, International Conference on Computer Vision, 2009.

Teaching

2009 -	"Signal Processing"	4th year course
2009 -	"Computer Vision"	4th year course
2008 -	"Pattern Recognition"	5th year Course

Professional Activities

Journal Reviewer:

IEEE Transactions on Pattern Analysis and Machine Intelligence (2006-).

IEEE Transactions on Image Processing (2006-).

International Journal of Computer Vision (2009-).

Computer Vision and Image Understanding (2008).

Image and Video Computing (2010).

IEEE Transactions on Information Forensics and Security (2008).

Computer Speech and Language (2009)

Member of Program Committee:

Int'l. Conf. on Computer Vision (ICCV) 2007,2009.

IEEE Conf. on Computer Vision and Pattern Recognition (CVPR) 2009,2010.

European Conference on Computer Vision (ECCV) 2010.

Int'l. Conf. on Energy Minimization Methods in Computer Vision and Pattern Recognition (EMMCVPR) 2007,2009.

Int'l. Workshop on Stochastic Image Grammars 2009.

IEEE Workshop on Perceptual Organization in Computer Vision, 2010.

Other conferences & workshops: ISVC 2009, ACCV 2009, MMSP 2009, ICVGIP 2008, 2010.

Workshop Organization:

ECCV'10 Area Chair Colloquium.

Presentations

National Technical University of Athens, Invited Lecture, Apr. '09.

UC Los Angeles, Image Processing Seminar, Sep. '08.

UC Irvine, Artificial Intelligence Seminar, June '08.

École Centrale Paris, May '08.

UC Berkeley, Computer Vision Group, April '08.

California Institute of Technology (Caltech), Computational Vision Lab, April '08.

Rutgers University, Dept. of Computer Science, March '08.

University of Pennsylvania (UPenn), GRASP Lab, March '08.

Johns Hopkins University, Center for Imaging Science, February '08.

Stony Brook University, Image Analysis Lab, February '08.

UC Los Angeles, Center for Imaging and Vision Sciences & Vision Lab Seminar, February 2008.

Lotus Hill Institute, June '07.

Personal

- Date of Birth: 8th January 1980.
- Languages: Greek (native), English (fluent), French, German.
- Affiliations: IEEE Member, Technical Chamber of Greece.

Publications

Journal Articles

1. I. Kokkinos and P. Maragos, *"Synergy Between Image Segmentation and Object Recognition Using the Expectation Maximization Algorithm."*, **IEEE Trans. on Pattern Analysis and Machine Intelligence**, Vol. 31(8), pp. 1486-1501.

2. I. Kokkinos, G. Evangelopoulos and P. Maragos, *"Texture Analysis and Segmentation Using Modulation Features, Generative Models and Weighted Curve Evolution."*, **IEEE Trans. on Pattern Analysis and Machine Intelligence**, Vol. 31(1), pp. 142-157.

3. I. Kokkinos, R. Deriche, O. Faugeras and P. Maragos, *"Computational Analysis and Learning for a Biologically Motivated Model of Boundary Detection."*, **Neurocomputing**, Vol. 71(10-12), pp. 1798-1812, 2008.

4. I. Kokkinos and P. Maragos, *"Nonlinear Speech Analysis Using Models for Chaotic Systems."*, **IEEE Trans. on Speech and Audio Processing**, Vol. 13(6), pp. 1098-1109, 2005.

Submitted & in preparation:

5. I. Kokkinos and A. Yuille, *"Inference and Learning with Hierarchical Compositional Models."*, *Submitted, Oct. 2009.*

6. I. Kokkinos and A. Yuille, *"Unsupervised Learning of Shape Models."*, *In preparation*

Conference Articles

7. I. Kokkinos, *"Highly Accurate Boundary Detection and Grouping."*, In Proc. **IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)**, 2010.

8. M. Bronstein and I. Kokkinos, *"Scale-invariant heat kernel signatures for non-rigid shape recognition."*, In Proc. **IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)**, 2010.

9. I. Kokkinos and A. Yuille, *"HOP: Hierarchical Object Parsing."*, In Proc. **IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)**, 2009.

10. I. Kokkinos and A. Yuille, *"Scale Invariance without Scale Selection."*, In Proc. **IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)**, 2008.

11. I. Kokkinos and A. Yuille, *"Unsupervised Learning of Object Deformation Models."*, In Proc. **IEEE Int'l. Conf. on Computer Vision (ICCV)**, 2007.

12. I. Kokkinos, P. Maragos and A. Yuille, *"Bottom-Up and Top-Down Object Detection Using Primal Sketch Features and Graphical Models."*, In Proc. **IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)**, 2006.

13. I. Kokkinos and P. Maragos, *"An Expectation Maximization Approach to the Synergy Between Image Segmentation and Object Categorization."*, In Proc. **IEEE Int'l. Conf. on Computer Vision (ICCV)**, 2005.

14. I. Kokkinos and P. Maragos, *"A Detection-Theoretic Approach to Texture and Edge Discrimination."*, In Proc. **4th Int'l. Workshop on Texture Analysis and Synthesis**, in conjunction with ICCV 2005.

15. G. Evangelopoulos, I. Kokkinos and P. Maragos, *"Advances in Variational Image Segmentation using AM-FM models: Regularized Demodulation and Probabilistic Cue Integration."*, In Proc. 3rd **IEEE Variational and Level-Set Methods (VLSM) Workshop**, in conjunction with ICCV 2005.

16. I. Kokkinos, R. Deriche, P. Maragos and O. Faugeras, *"A Biologically Motivated and Computationally Tractable Model of Low- and Mid- Level Vision Tasks."*, In Proc. **European Conference on Computer Vision (ECCV)**, 2004.

17. I. Kokkinos, G. Evangelopoulos and P. Maragos, *"Advances in Texture Analysis: Energy Dominant Component & Multiple Hypothesis Testing."*, In Proc. **IEEE Int'l. Conf. on Image Processing**, 2004.

18 I. Kokkinos, G. Evangelopoulos and P. Maragos, *"Modulation-Feature based Textured Image Segmentation Using Curve Evolution."*, In Proc. **IEEE Int'l. Conf. on Image Processing**, 2004.

19 V. Pitsikalis, I. Kokkinos and P. Maragos, *"Nonlinear Analysis of Speech Signals: Generalized Dimensions and Lyapunov Exponents."*, In Proc. **European Conference on Speech Communication and Technology (EUROSPEECH)**, 2003.

20 P. Maragos, A. Dimakis and I. Kokkinos. *"Some Advances in Nonlinear Speech Modeling Using Modulations Fractals and Chaos."* In Proc. **IEEE Int'l. Conf. on Digital Signal Processing**, 2002.

Technical Reports

21 I. Kokkinos, R. Deriche, O. Faugeras and P. Maragos, *"Towards Bridging the Gap Between Biological and Computational Segmentation."* INRIA Research Report, 2007.