# NIKOS KOMODAKIS

## **EDUCATION**

2013 Habilitation à Diriger des Recherches (HDR)

Universite Paris-Est, France

Title: Graphical Model Inference and Learning for Visual Computing

Committee: John Tsitsiklis (MIT)

Ramin Zabih (Cornell University)

Christoph Schnoerr (Heidelberg University)

Fredrik Kahl (Lund University)

Jean-Christophe Pesquet (LIGM/University Paris-Est Marne-la-Vallee)

Patrick Bouthemy (INRIA) Patrick Perez (Technicolor)

2006 Ph.D. in Computer Science (with highest honors)

Computer Science Department, University of Crete

Title: Optimization Algorithms for Discrete Markov Random Fields, with Applications to

Computer Vision

1997 Master in Computer Science

Computer Science Department, University of Crete

1995 **Bachelor in Computer Science** 

Computer Science Department, University of Crete

## **CURRENT AFFILIATIONS**

- Assistant Professor

**Computer Science Department, University of Crete, Greece** 

Associated Faculty Member

Institute of Applied and Computational Mathematics, FORTH, Greece

- Senior Collaborating Researcher

Archimedes Research Unit on AI, Athena RC, Greece

#### **PREVIOUS POSITIONS**

- Research Scientist at LIGM

CNRS/ENPC/Univ. Paris-Est, France

Associate Professor

Ecole des Ponts ParisTech (ENPC), France

- Affiliated adjunct professor

Ecole Normale Superieure de Cachan

- Adjunct Professor

University of Crete, Greece

- Post-Doctoral Researcher

Ecole Centrale de Paris, France

#### ASSOCIATE EDITOR/EDITORAL BOARD MEMBER

Computational Intelligence Journal

International Journal of Computer Vision

Computer Vision and Image Understanding Journal

#### **GUEST EDITOR & EDITOR FOR SPECIAL ISSUES**

"Graphical Models for Scene Understanding", International Journal of Computer Vision (2014)

"Inference and Learning of Graphical Models: Theory and Applications in Computer Vision and Image Analysis", Computer Vision and Image Understanding Journal (2014)

"Optimization for vision, graphics and medical imaging: Theory and applications", Computer Vision and Image Understanding Journal (2011)

#### AREA CHAIR

- IEEE Conference on Computer Vision and Pattern Recognition 2023 (CVPR 2023)
- IEEE Conference on Computer Vision and Pattern Recognition 2022 (CVPR 2022)
- IEEE Conference on Computer Vision and Pattern Recognition 2021 (CVPR 2021)
- European Conference in Computer Vision 2020 (ECCV 2020)
- British Machine Vision Conference 2018 (BMVC 2019)
- International Conference on Computer Vision 2015 (ICCV 2019)
- British Machine Vision Conference 2018 (BMVC 2018)
- IEEE Conference on Computer Vision and Pattern Recognition 2018 (CVPR 2018)
- British Machine Vision Conference 2017 (BMVC 2017)
- IEEE Conference on Computer Vision and Pattern Recognition 2017 (CVPR 2017)
- IEEE Conference on Computer Vision and Pattern Recognition 2016 (CVPR 2016)
- International Conference on Computer Vision 2015 (ICCV 2015)
- 11th Asian Conference on Computer Vision 2012 (ACCV 2012)

**VIEW ALL** 

### RESEARCH IMPACT

Cited by

## ✓ Citations (Google Scholar)

,							
				All		Since	2019
Citations			312	82	23698		
h-index			55				41
i10-index				85			59
				_	_		6000
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		ı	ı	ł	ı		3000
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2017 2018	2019	2020	2021	2022	2023	2024	0

- ✓ 106 peer-reviewed publications including:
  - 45 publications in the top-rank conferences CVPR, ICCV, ECCV, ICLR, NIPS, IPMI, MICCAI These are regarded as the most premium and selective peer-reviewed conferences in my fields of research with even lower acceptance rates than the top journals. For instance, CVPR, ICCV, ECCV, ICLR, NIPS are among the highest-ranked conferences for machine learning and artificial intelligence with impact factor rankings much higher even than the top-rank journals in the field
  - 30 journal publications in top-ranked journals

This includes, for instance, journals such as the IEEE Trans. on Pattern Analysis and Machine Intelligence that is one of the highest-ranked journals for machine learning and artificial intelligence

- **3 book chapters** (MIT press, Springer, Elsevier)
- ✓ 1 Book ("Image Processing and Analysis" Kallipos, Open Academic Editions)
- ✓ 2 US Patents: I have contributed in two software packages, one corresponding to an efficient, generic optimization method for graphical model inference and one for a deformable fusion algorithm for multimodal 3D registration and fusion. They are used by several academic and clinical institutions world-wide for research purposes. They have been patented (2 US patents) and licensed to 2 medical imaging software companies and currently sold as a product in several sites for clinical practice
- ✓ Prizes, awards, distinctions
  - World's Top 2% Scientists List (<a href="https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/6">https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/6</a>)
  - Top 15 Greek Computer Scientists List (<a href="https://research.com/scientists-rankings/computer-science/gr">https://research.com/scientists-rankings/computer-science/gr</a>)
  - Machine Unlearning Challenge Award at NeurIPS 2023
  - Best Poster Award at IPMI 2023
  - Best Paper Award for IGARSS 2015
  - **Honorable Mention Paper Prize** at EarthVision 2015 (CVPR 2015)
  - Best Paper Award at the 2010 IEEE International Symposium on Biomedical Imaging (ISBI 2010)
  - Francois Erbsmann Prize at the 20th International Conference on Information Processing in Medical Imaging, 2007 (IPMI 2007)

# TEACHING \_\_\_\_

- Digital Image Processing
   Computer Science Department, University of Crete
- *Linear Algebra*Computer Science Department, University of Crete
- Neural Networks and Learning of Hierarchical Representations Computer Science Department, University of Crete
- Optimization Methods
   Computer Science Department, University of Crete
- Discrete Optimization for Vision and Learning
   Master program "Mathematics, Vision and Learning"
   Department of Mathematics, École Normale Supérieure de Cachan
- Data Processing and Artificial Vision
   Computer Science and Applied Mathematics Department, Ecole des Ponts ParisTech
- Discrete Optimization Methods in Computer Vision Computer Science Department, University of Crete
- Digital Image Processing: Basics, Challenges and Perspectives
  Applied Mathematics Department, Ecole Centrale de Paris