Iasonas Kokkinos Curriculum Vitae

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An	pointments
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10/2016 -	Associate Professor	UCL, Dept. of Computer Science
09/2022 - 08/2024	Senior Manager, CV Engineering	Snap Inc.
09/2020 - 08/2022	Manager, CV Engineering	Snap Inc.
11/2018 - 09/2020	Co-founder and CEO	Ariel AI
12/2016 - 10/2018	Research Scientist	Facebook AI Research
10/2014 - 09/2016	Associate Professor	ECP, Dept. of Applied Mathematics
09/2008 - 09/2014	Assistant Professor	ECP, Dept. of Applied Mathematics
09/2008 - 09/2016	Affiliate Researcher	INRIA-Saclay, Galen Group
06/2006 - 08/2008	Postdoctoral Researcher	UCLA, Dept. of Statistics

Education

Habilitation à Diriger des Recherches (HDR), Computer Science, 2013

Université Paris-Est.

HDR Dissertation: "Learning and Optimization for Shape-based representations."

Ph.D., Electrical and Computer Engineering, 2006

National Technical University of Athens.

Ph.D. Dissertation: "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. Thesis: "Modeling and Prediction of Speech Signals using Chaotic Time-Series Analysis Techniques."

Curriculum Development

Introduction to Supervised Learning (2016-2020)

Master level course, 10 lectures - 30 teaching hours, attended by 120 students.

The course provides an introduction to Machine Learning and focuses on discriminatively trained models including Linear Regression, Logistic Regression, Adaboost, Support Vector Machines, Neural Networks and Deep Learning.

Introduction to Deep Learning (2014-2016) Master Level course, 8 lectures - 24 teaching hours, attended by 100-120 students

The course covers the principles of learning algorithms for deep, multi-layered classifier architectures (Deep Networks). We address both the Unsupervised and Discriminative Training of Deep Convolutional Networks, Parameter Estimation in Graphical Models using Maximum Entropy, Sampling Algorithms, as well as deep architectures adapted to Computer Vision tasks, such as Object Detection.

Machine Learning for Computer Vision (2008-2016)

Master level course, 8 lectures - 24 teaching hours, attended by 60-70 students.

The course covers discriminative (Logistic Regression, Adaboost, Support Vector Machines, Multiple Instance Learning) and generative models (Mixture Models and Expectation-Maximization, Linear Models, Hidden Markov Models, Markov Random Fields) for vision, with an emphasis on structured models.

Introduction to Signal Processing (2009-2015)

7th semester course, 11 lectures - 22 teaching hours, attended by 35-45 students.

The course covers standard concepts from signals and systems (Frequency-domain analysis of Signals and Systems, Modulation and Gabor filters, Sampling, the Discrete-Time Fourier Transform, the Z-transform, the Fast Fourier Transform) and elements of random signals (Autoregressive-Moving Average Processes, Wiener and Kalman filtering).

Introduction to Computer Vision (2009-2013)

8th semester course, 11 lectures - 22 teaching hours, attended by 20-30 students.

The course covers techniques for image analysis (Filterbanks, Scale-Space and Partial Differential Equations), energy minimization (Calculus of Variations and Curve Evolution, Markov Random Fields), and category modeling (Active Appearance Models, Deformable Part Models/Graphical Models, Bag-of-Words models) with applications in denoising, image segmentation, motion estimation, object detection and tracking.

PhD Students

Supervised

Haithem Boussaid, École Centrale Paris (2010-2014)

Co-advised with Nikos Paragios.

Topic: Learning deformable models for medical image analysis

Stavros Tsogkas, École Centrale Paris (2011-2015)

Topic: Shape-based optimization for object category detection.

Siddhartha Chandra, École Centrale Paris (2014-2018)

Co-advised with Pawan Kumar.

Topic: Efficient learning and optimization for 3D visual data.

Stefan Kinauer, École Centrale Paris (2014-2018)

Topic: Surface-based representations for high-level vision.

Riza Alp Guler, École Centrale Paris (2015-2018)

Topic: Learning-based models for surface analysis.

Zbigniew Wojna, University College London (2016-2019)

Co-advised with John Shawe-Taylor.

Topic: Advancing Deep Learning Techniques for Machine Vision.

Eleni Chiou, University College London (2017-2022)

Co-advised with Laura Panagiotaki.

Topic: Deep Learning for DW-MRI Understanding.

Filippos Kokkinos, University College London (2019-2022)

Topic: Structured Models for Scene Understanding.

Stefano Bloomberg, University College London (2017-2023)

Advisor: Daniel Alexander.

Topic: Deep Learning for Efficient Medical Imaging.

Eric Tuan-Le, University College London (2018-2024)

Co-advised with Niloy Mitra.

Topic: 3D Parsing, Estimation, and Learning Using Weak Image Supervision.

Edward Bartrum, University College London (2018-)

Topic: Attention and Deep Learning.

External

Pierre-Andre Savalle, École Centrale Paris (2014)

Advisors: Gilles Fay and Nicolas Vayatis. Topic: Deep Learning for Object Detection.

Olivier Teboul, École Centrale Paris (2008-2011)

Advisor: Nikos Paragios.

Topic: Reinforcement learning-based parsing of building facades with shape grammars.

Eduard Trulls, Universitad Polytecnica de Catalunia (2012-2015)

Advisors: Francesc Moreno and Alberto Sanfeliu.

Topic: Dense segmentation-aware descriptors for matching and recognition.

Michalis Raptis, University of California at Los Angeles (2009-2011)

Advisor: Stefano Soatto.

Topic: Mid-level video models for action recognition and localization.

PhD Thesis Committees

Anastasios Roussos, National Technical University of Athens (2010)

Topic: Nonlinear Diffusion in Computer Vision and Statistical Shape Models, with Applications in Image Analysis of Articulators of Voiced and Signed Speech.

Olivier Teboul, Ecole Centrale Paris (2011)

Topic: Shape Grammar Parsing: Application to Image-based Modeling.

Nikolaos Dimitriou, Aristotle University of Thessaloniki (2014)

Topic: Video Segmentation using Point Trajectories.

Mateusz Kozinski, Ecole des Ponts ParisTech (2015)

Topic: Segmentation of Facade Images with Shape Priors (thesis reviewer).

Varun Jampani, Max Planck Institute (2017)

Topic: Learning Inference Models for Computer Vision (thesis reviewer).

Raghudeep Gadde, Ecole des Ponts ParisTech (2017)

Topic: Semantic Segmentation of Highly Structured and Weakly Structured Images.

Youssef Tamaazousti, University of Paris-Saclay (2018)

Topic: On the Universality of Visual and Multimodal Representations.

Pavel Tokmakov, INRIA (2018)

Topic: Learning from Motion (thesis reviewer).

Sergey Zagoryuko, ENPC (2018)

Topic: Weight pameterizations in deep neural networks (thesis reviewer).

Tian F. Vu, INRIA (2018)

Topic: Learning visual models for person detection and action prediction (thesis reviewer).

James Thewlis, University of Oxford (2018)

Topic: Objects from Motion.

Aaron Chadha, UCL (2018)

Topic: From Pixels to Spikes: Efficient Multimodal Learning in the Presence of Domain Shift.

Gul Varol, INRIA (2019)

Topic: Learning human body and human action representations from visual data.

Anurag Arnab, University of Oxford (2019)

Topic: Pixel-level Scene Understanding with Deep Structured Models

Kritaphat Songsri-In, Imperial College (2020)

Topic: Deep Learning for Facial Analysis

Mengjiao Wang, Imperial College (2020)

Learning the Multilinear Structure of Visual Data

Garoe Dorta, Bath University (2020)

Learning models for intelligent photo editing

Simone Foti, University College London (2023)

Latent Disentanglement for the Analysis and Generation of Digital Human Shapes

Nicola Popovic, ETH Zurich (2024)

Dense, sparse, and weak labels for visual understanding and generation

Research Habilitation Committees

Matthieu Aubry, Ecole des Ponts (2019)

Neural Networks for Cross-Modal Recognition and Vector Object Generation

Research Grants

H2020 FET Project EndoMapper (2019-2023)

Real-time mapping from endoscopic video

Joint research project with Unizar (Spain), UCA (France), Odin (UK); Co-Investigator with Dan Stoyanov

Our goal is to use 3D reconstruction techniques and machine learning for real-time reconstruction from endoscopic video.

Funding: 967K Pounds for UCL, 3.697K Euros total.

FP7 H2020 Project I-SUPPORT (2015-2018)

ICT-Supported bath robots

Joint research project with ROBOTNIK (Spain), SSSA (Italy), Bethenien (Germany), NTUA (Greece)

Our goal is to use 3D human pose estimation in a service robotics system aimed at assisting the elderly in bathing activitie.

Funding: 250K Euros for INRIA, 3.300K Euros total.

FP7 ICT-9 Project RECONFIG (2013-2016)

Cognitive, Decentralized Coordination of Heterogeneous Multi-Robot Systems via Reconfigurable Task Planning

Joint research project with KTH (Sweden), U. Aalto (Finland), NTUA (Greece)

Our goal is to use 3D object understanding and localization as a medium for multi-agent coordination and collaboration.

Funding: 400K Euros for ECP, 2.300K Euros total.

FP7 ICT-9 Project MOBOT (2013-2016)

Intelligent Active Mobility Assistance Robot integrating Multimodal Sensory Processing, Proactive Autonomy and Adaptive Interaction.

Joint research project with TU Munich, U. Heidelberg (Germany), Accrea (Poland), NTUA-ICCS, ILSP (Greece)

Our goal is to equip robotic walking assistants with 3D pose estimation and action recognition capabilities to enable the proactive assistance of elderly users with walking disabilities.

ANR-JCJC HiCoRe (2010-2014)

HIerarchical COmpositional REpresentation for computer vision.

Joung Researcher Award of the French National Research Foundation

Our goal is to develop computational mechanisms for inference and learning in hierarchical, shape-based object representations. Funding: 180K Euros for ECP

Equipment Grant from NVIDIA Corp., 2014

Funding: 300K Euros for INRIA, 3.100K Euros total.

Two Nvidia Tesla K-40 Graphics cards (12K Euros) for research in Deep Learning.

Academic Service

Associate Editor

Image and Video Computing Journal (2011-2016)

Computer Vision and Image Understanding (2015-2016)

Guest Editor

Computer Vision and Image Understanding, Special Issue on Deep Learning in Computer Vision, 2016.

Computer Vision and Image Understanding, Special Issue on Generative Models in Computer Vision, 2014.

Area Chair

IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2025.

IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2024.

European Conference on Computer Vision (ECCV), 2024.

International Conference on Computer Vision (ICCV), 2023.

IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2022.

IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2021.

European Conference on Computer Vision (ECCV), 2022.

European Conference on Computer Vision (ECCV), 2020.

European Conference on Computer Vision (ECCV), 2018.

IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2018.

International Conference on Computer Vision (ICCV), 2017.

British Machine Vision Conference (BMVC), 2017

European Conference on Computer Vision (ECCV), 2016.

Asian Conference on Computer Vision (ACCV), 2016.

IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2016.

IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2015.

IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2012.

Program Chair

Video Segmentation Workshop, in conjunction wit ECCV, 2018.

IEEE Workshop on Perceptual Organization in Computer Vision (POCV), 2012.

Workshop Chair

European Signal Processing Conference (EUSIPCO), 2017.

Tutorial Co-Organizer

Creative AI: Deep Learning for Computer Graphics, SIGGRAPH 2019.

Deep Learning for Geometry, Eurographics 2018.

From Statistical Signal Processing to Probabilistic Deep Learning, ICCV 2015.

SPIL- Search and Planning for Inference and Learning, CVPR 2015.

BASIS- BAses for Surface and Image Analysis, CVPR 2014.

Journal Reviewer

International Journal of Computer Vision (2009-).

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

IEEE Transactions on Image Processing (2006-).

IEEE Transactions on Systems, Man and Cybernetics, B (2011).

IEEE Transactions on Neural Networks (2010).

Computer Vision and Image Understanding (2008-).

Image and Video Computing Journal (2010).

Computer Speech and Language (2009).

EURASIP Journal of Image and Video Processing (2012).

Machine Vision and Applications (2013).

Conference Reviewer

Int'l. Conf. on Computer Vision (ICCV) 2007, 2009, 2011, 2013, 2015, 2019, 2021.

IEEE Conf. on Computer Vision and Pattern Recognition (CVPR) 2009, 2010, 2011, 2013, 2014, 2016, 2019, 2020, 2023, 2024.

European Conf. on Computer Vision (ECCV) 2010, 2014.

Int'l. Conference on Machine Learning (ICML), 2018

Neural Information Processing Systems (NIPS), 2014, 2015, 2017, 2019, 2023.

Int'l. Conference on Learning Representations (ICLR), 2016, 2017

Int'l. Conf. on Artificial Intelligence and Statistics (AISTATS) 2012, 2014, 2015.

Asian Conf. on Computer Vision (ACCV) 2009, 2010, 2012, 2014.

Int'l. Conf. on Energy Minimization Methods in Computer Vision and Pattern Recognition (EMMCVPR) 2007, 2009, 2011, 2013, 2015.

Int'l. Workshop on Vision, Modeling and Visualization, 2013.

ACCV Workshop on Detection and Tracking in Challenging Environments, 2012.

Int'l. Workshop on Stochastic Image Grammars 2009, 2011.

IEEE Workshop on Perceptual Organization in Computer Vision (POCV), 2010, 2014.

Int'l Symposium on Visual Computing, 2009, 2010, 2011.

Indian Conference on Vision Graphics and Image Processing (ICVGIP), 2008, 2010.

Grant Reviewer

Royal Society of Engineering Fellowships, 2018

French National Research Agency (ANR), 2014

Swiss National Science Foundation, 2013.

European Union, ERC awards, 2010.

Distinctions and Awards

Best Paper award, CVPR Workshop on Computer Vision for Augmented and Virtual Reality, 2019.

Best Paper award, CVPR Workshop on Perceptual Organization in Computer Vision, 2016.

Best Reviewer award, IEEE Conference on Computer Vision and Pattern Recognition, 2013.

Best Reviewer award, International Conference on Computer Vision, 2009.

Bodossaki Foundation Scholarship as a graduate student.

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

Paris Kanellakis award for highest ranking student in Computer Science major.

National scholarship foundation awards as an undergraduate.

Personal

Date of Birth: 8^{th} January 1980.

Languages: Greek, English, French, German.

Affiliations: IEEE Member, Technical Chamber of Greece.

Publications

Journal articles, Book Chapters

- 1 L. Ning et al "Cross-scanner and cross-protocol multi-shell diffusion MRI data harmonization: Algorithms and results" Neuroimage 2020
- 2 P. Manescu et al. "Expertlevel automated malaria diagnosis on routine blood films with deep neural networks" American Journal of Hematology 95 2020
- 3 A Zlatintsi et al. "I-Support: A robotic platform of an assistive bathing robot for the elderly population" Robotics and Autonomous, 2020
- 4 L.-C. Chen, G. Papandreou, I. Kokkinos, K. Murphy and A. L. Yuille: "DeepLab: Semantic Image Segmentation with Deep Convolutional Nets, Atrous Convolution, and Fully Connected CRFs." IEEE Trans. on Pattern Analysis and Machine Intelligence, 2018
- 5 P. Kondaxakis, K. Gulzar, S. Kinauer, I. Kokkinos and V. Kyrki: "RobotRobot Gesturing for Anchoring Representations", IEEE Trans. on Robotics, 2018
- 6 M. Cimpoi, S. Maji, I. Kokkinos, A. Vedaldi, "Deep Filter Banks for Texture Recognition, Description, and Segmentation" International Journal of Computer Vision (IJCV), 2016
- 7 E. Trulls, I. Kokkinos, A. Sanfeliu and F. Moreno, "Dense Segmentation-Aware Descriptors" In Dense Image Correspondences for Computer Vision, Ed.s C. Liu and T. Hassner, Springer, 2015
- 8 I. Kokkinos "Accelerating Deformable Part Models with Branch-and-Bound", In Perspectives in Shape Analysis Dagstuhl Seminar on New Perspectives in Shape Analysis, Ed.s M. Breu, A. Bruckstein, P. Maragos and St. Wuhrer, Springer, 2015
- 9 O. Teboul, I. Kokkinos, S. Loic, P. Katsourakis and N. Paragios, "Parsing Facades with Shape Grammars and Reinforcement Learning.". IEEE Trans. on Pattern Analysis and Machine Intelligence, Nov. 2012, IEEE computer Society Digital Library.
- 10 I. Kokkinos and A. Yuille, "Inference and Learning with Hierarchical Shape Models.", International Journal of Computer Vision (IJCV), Vol. 92(2), pp. 201-225, 2011.
- 11 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, 2009.

- 12 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, 2009.
- 13 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.
- 14 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.

Double-blind, peer-reviewed conference articles (acceptance rate 20-30%)

- 15 E. T. Le, A. Kakolyris, P. Koutras, H. Tam, E. Skordos, G. Papandreou, R. A. Gler, I. Kokkinos, "MeshPose: Unifying DensePose and 3D Body Mesh reconstruction", Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2021.
- 16 E. Le, E. Bartrum and I. Kokkinos "StyleMorph: Disentangled 3D-Aware Image Synthesis with a 3D Morphable StyleGAN", Proc. Int.l Conf. on Learning Representations (ICLR), 2023.
- 17 F Kokkinos, and I Kokkinos "To The Point: Correspondence-driven monocular 3D category reconstruction", Advances in Neural Information Processing Systems 34, 2021
- 18 F. Kokkinos, and I. Kokkinos "Learning monocular 3D reconstruction of articulated categories from motion", Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2021.
- 19 H. Wang, A. Guler, I. Kokkinos, G. Papandreou, and S. Zafeiriou, "BLSM: A Bone-Level Skinned Model of the Human Mesh", Proc. European Conf. on Computer Vision (ECCV), 2020
- 20 D. Kulon, A. Guler, I. Kokkinos, M. Bronstein, and S. Zafeiriou, "Weakly-Supervised Mesh-Convolutional Hand Reconstruction in the Wild", Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), Oral Presentation, 2020.
- 21 E.-T. Le, I. Kokkinos and N. Mitra, "Going Deeper With Lean Point Networks", Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2020.
- 22 A. Guler and I. Kokkinos, "HoloPose: Synergistic, Part-Based 3D Human Reconstruction In-The-Wild", Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), Oral Presentation, 2019.
- 23 N. Neverova, J. Thewlis, A. Guler, I. Kokkinos and A. Vedaldi, "DensePose-Slim: Cheaper Learning from Motion Cues", Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), Oral Presentation, 2019.
- 24 K. Maninis, I. Radosavovic and I. Kokkinos, "Attentive Single-tasking of Multiple Tasks", Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2019.
- 25 Z. Shu, M. Sahasrabudhe, R. A. Guler, D. Samaras, N. Paragios and I. Kokkinos, "Deforming Autoencoders: Unsupervised Disentangling of Shape and Appearance", Proc. European Conf. on Computer Vision (ECCV), 2018
- 26 N. Neverova, R. A. Guler and I. Kokkinos, "Dense Pose Transfer", Proc. European Conf. on Computer Vision (ECCV), 2018

- 27 R.A. Guler, N. Neverova, I. Kokkinos, "DensePose: Dense Human Pose Estimation In The Wild", Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), Oral Presentation, 2018.
- 28 S. Chandra, C. Couprie, I. Kokkinos, "Deep Spatio-Temporal Random Fields for Efficient Video Segmentation", Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2018.
- 29 S. Chandra, N. Usunier, I. Kokkinos, "Dense and Low-Rank Gaussian CRFs Using Deep Embeddings", Proc. Int.l Conf. on Computer Vision (ICCV), 2017.
- 30 A. Harley, K. Derpanis, I. Kokkinos, "Segmentation-Aware Convolutional Networks Using Local Attention Masks", Proc. Int.l Conf. on Computer Vision (ICCV), 2017.
- 31 I. Kokkinos, "UberNet: A 'Universal' CNN for the joint treatment of Low-, Mid-, and High-Level Vision Problems", Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), Oral Presentation, 2017.
- 32 A. Guler, G. Trigeorgis, E. Antontakos, P. Snape, S. Zafeiriou and I. Kokkinos "DenseReg: Fully Convolutional Dense Shape Regression In-the-Wild", Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2017.
- 33 G. Trigeorgis, E. Antontakos, P. Snape, I. Kokkinos and S. Zafeiriou "Dense Face Normal Estimation in the Wild", Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2017.
- 34 S. Chandra and I. Kokkinos "Fast, Exact and Multi-Scale Inference for Semantic Image Segmentation with Deep Gaussian CRFs", European Conference on Computer Vision (ECCV), 2016.
- 35 I. Kokkinos, "Pushing the Boundaries of Boundary Detection using Deep Learning", Proc. Int.l Conf. on Learning Representations (ICLR), 2016.
- 36 E. Simo-Serra, E. Trulls, L. Ferraz, I. Kokkinos, P. Fua, F. Moreno-Noguer, "Deep Convolutional Feature Point Descriptors" Proc. Int.l Conf. on Computer Vision (ICCV), 2015.
- 37 G. Papandreou, I. Kokkinos and P. A. Savalle "Modeling Local and Global Deformations in Deep Learning: Epitomic Convolution, Multiple Instance Learning, and Sliding Window Detection", Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), Oral Presentation, 2015.
- 38 L.-C. Chen, G. Papandreou, I. Kokkinos, K. Murphy and A. Yuille "Semantic Image Segmentation with Deep Convolutional Nets and Fully Connected CRFs" Proc. Int.l Conf. on Learning Representations (ICLR) 2015.
- 39 H. Boussaid and I. Kokkinos "Fast and Exact: ADMM-Based Discriminative Shape Segmentation with Loopy Part Models", Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2014.
- 40 E. Trulls, S. Tsogkas, I. Kokkinos, A. Sanfeliu and F. Moreno, "Segmentation-Aware Deformable Part Models" Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2014.
- 41 M. Cimpol, S. Maji, I. Kokkinos, S. Mohammad, and A. Vedaldi "Describing Textures in the Wild" Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2014.

- 42 A. Vedaldi, S. Mahendran, S. Tsogkas, S. Maji, R. Girshick, J. Kannala, E. Rahtu, I. Kokkinos, M. Blaschko, N. Saphra and S. Mohammad "Understanding Objects in Detail with Fine-grained Attributes", Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2014.
- 43 I. Kokkinos, "Shufflets: Shared Mid-level Parts for Fast Multi-Category Detection" Proc. Int.l Conf. on Computer Vision (ICCV), Oral Presentation, 2013.
- 44 E. Trulls, I. Kokkinos, A. Sanfeliu and F. Moreno, "Dense Segmentation-Aware Descriptors" In Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2013.
- 45 S. Tsogkas and I. Kokkinos, "Learning-based Symmetry Detection in Natural Images" In Proc. European Conf. on Computer Vision (ECCV), 2012.
- 46 I. Kokkinos, M. Bronstein, R. Littman and A. Bronstein "Intrinsic Shape Context Descriptors for Deformable Shapes" In Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2012.
- 47 M. Raptis, I. Kokkinos, S. Soatto "Discovering Discriminative Action Parts from Mid-Level Video Representations" In Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2012.
- 48 I. Kokkinos, "Rapid Deformable Object Detection using Dual Tree Branch and Bound" In Proc. Neural Information Processing Systems (NIPS), 2011.
- 49 O. Teboul, I. Kokkinos, L. Simon, P. Koutsourakis, and N. Paragios, "Shape Grammar Parsing via Reinforcement Learning" In Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2011.
- 50 I. Kokkinos, "Boundary Detection using F-measure, Filter- and Feature Boost.", In Proc. European Conference in Computer Vision (ECCV), 2010.
- 51 I. Kokkinos, "Highly Accurate Boundary Detection and Grouping.", In Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2010.
- 52 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.
- 53 I. Kokkinos and A. Yuille, "HOP: Hierarchical Object Parsing.", In Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2009.
- 54 I. Kokkinos and A. Yuille, "Scale Invariance without Scale Selection.", In Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2008.
- 55 I. Kokkinos and A. Yuille, "Unsupervised Learning of Object Deformation Models.", In Proc. IEEE Int'l. Conf. on Computer Vision (ICCV), 2007.
- 56 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.
- 57 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.
- 58 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.

Peer-reviewed conference and workshop articles

- 59 E. Chiou, E. Panagiotaki and I. Kokkinos: "Beyond Deterministic Translation for Unsupervised Domain Adaptation" British Machine Vision Conference (BMVC) 2022
- 60 E.T. Le, N.J. Mitra and I Kokkinos "Softmesh: Learning Probabilistic Mesh Connectivity via Image Supervision" International Conference on 3D Vision (3DV), 2021
- 61 E. Chiou, F Giganti, S Punwani, I Kokkinos and E. Panagiotaki "Harnessing uncertainty in domain adaptation for MRI prostate lesion segmentation" International Conference on Medical Image Computing and Computer-Assisted Intervention (MICCAI), 2020
- 62 M. Sahasrabudhe, Z. Shu, E. Bartrum, R. A. Guler, D. Samaras and I. Kokkinos "Lifting AutoEncoders: Unsupervised Learning of a Fully-Disentangled 3D Morphable Model using Deep Non-Rigid Structure from Motion", Deep Learning Meets Geometry Workshop, ICCV, 2019
- 63 S. Bloomberg, R. Tanno, I. Kokkinos, D. Alexander, "Deeper Image Quality Transfer: Training Low-Memory Neural Networks for 3D Images.", International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI), 2018
- 64 N. Zeghidour, N. Usunier, I. Kokkinos, T. Schatz, G. Synnaeve, E. Duproux, "Learning Filterbanks from Raw Speech for Phone Recognition.", ICASSP 2018
- 65 N. Neverova and I. Kokkinos, "Mass Displacement Networks", British Machine Vision Conference (BMVC) 2018
- 66 E. Chiou, F. Giganti, E. Bonet-Carne, S. Punwani, I. Kokkinos and E. Panagiotaki, "Prostate Cancer Classification on VERDICT DW-MRI Using Convolutional Neural Networks" Machine Learning in Medical Imaging, MICCAI 2018
- 67 S. Kinauer, A. Guler, S. Chandra, I. Kokkinos, "Structured Output Prediction and Learning for Deep Monocular 3D Human Pose Estimation", Energy Minimization in Computer Vision and Pattern Recognition (EMMCVPR), 2017
- 68 A. Guler, N. Kardaris, S. Chandra, V. Pitsikalis, C. Werner, K. Hauer, C. S. Tzafestas, P. Maragos, I. Kokkinos: "Human Joint Angle Estimation and Gesture Recognition for Assistive Robotic Vision.", European Conference on Computer Vision Workshops, 2016.
- 69 S. Kinauer, M. Berman and I. Kokkinos "Monocular Surface Reconstruction Using 3D Deformable Part Models" European Conference on Computer Vision Workshops, 2016.
- 70 M. Shakeri, S. Tsogkas, E. Ferrante, S. Lippe, S. Kadouri, N. Paragios and I. Kokkinos, "Coregistration and Cosegmentation with Weak Segmentation Priors", International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI), 2016.
- 71 S. Tsogkas, M. Shakeri, E. Ferrante, S. Lippe, S. Kadoury, N. Paragios, I. Kokkinos, Subcortical Brain Structure Segmentation Using F-CNNs, International Symposium on Biomedical Imaging (ISBI), 2016.
- 72 A. W. Harley, K. G. Derpanis, I. Kokkinos Learning Dense Convolutional Embeddings for Semantic Segmentation, Proc. Int.l Conf. on Learning Representations (ICLR), workshop track, 2016.
- 73 S. Chandra, G. Chrysos and I. Kokkinos, "Surface Based Object Detection in RGBD Images", Proc. British Machine Vision Conference (BMVC), 2015.
- 74 P.-A. Savalle, S. Tsogkas, G. Papandreou and I. Kokkinos, "Deformable Part Models with CNN Features", Proc. Workshop on Parts and Attributes, in conjunction with ECCV, 2014.

- 75 H. Boussaid, I. Kokkinos, and N. Paragios "Discriminative Learning of Deformable Contour Models", International Symposium on Biomedical Imaging (ISBI), 2014.
- 76 Evita-Stavroula Fotinea, Eleni Efthimiou, Athanasia-Lida Dimou, Theodore Goulas, Panayotis Karioris, Angelika Peer, Petros Maragos, Costas S. Tzafestas, Iasonas Kokkinos, Klaus Hauer, Katja Mombaur, Yiannis Koumpouros and Bartlomiej Stanczyk: "Data Acquisition towards Defining a Multimodal Interaction Model for Human Assistive Robot Communication." HCI (6) 2014.
- 77 Xanthi S. Papageorgiou, Costas S. Tzafestas, Petros Maragos, Georgios Pavlakos, Georgia Chalvatzaki, George Moustris, Iasonas Kokkinos, Angelika Peer, Bartlomiej Stanczyk, Evita-Stavroula Fotinea, Eleni Efthimiou: "Advances in Intelligent Mobility Assistance Robot Integrating Multimodal Sensory Processing." HCI (6) 2014.
- 78 H. Boussaid, I. Kokkinos, and N. Paragios "Rapid Mode Estimation for 3D MRI Brain Tumor Segmentation", Energy Minimization Methods in Computer Vision and Pattern Recognition (EMMCVPR), 2013.
- 79 I. Kokkinos, "Bounding Part Scores for Rapid Detection with Deformable Part Models", Proc. Workshop on Parts and Attributes, in conjunction with ECCV, 2012.
- 80 H. Boussaid, S.Kadoury, I. Kokkinos, J.-Y. Lazennec, G. Zheng, N. Paragios, "3D Model-based Reconstruction of the Proximal Femur from Low-dose Biplanar X-Ray Images", Proc. British Machine Vision Conference (BMVC), 2011.
- 81 A. M. Bronstein, M. M. Bronstein, B. Bustos, U. Castellani, M. Crisani, B. Falcidieno, L. J. Guibas, I. Kokkinos, V. Murino, M. Ovsjanikov, G. Patan, I. Sipiran, M. Spagnuolo, J. Sun, "SHREC 2010: robust feature detection and description benchmark.", Proc. EUROGRAPHICS Workshop on 3D Object Retrieval (3DOR), 2010.
- 82 A. M. Bronstein, M. M. Bronstein, U. Castellani, B. Falcidieno, A. Fusiello, A. Godil, L. J. Guibas, I. Kokkinos, Z. Lian, M. Ovsjanikov, G. Patan, M. Spagnuolo, R. Toldo, "SHREC 2010: robust large-scale shape retrieval benchmark.", Proc. EUROGRAPHICS Workshop on 3D Object Retrieval (3DOR), 2010.
- 83 I. Kokkinos and A. Yuille, "Inference and Learning with Hierarchical Compositional Models.", In Proc. 1st Int'l. Workshop on Stochastic Image Grammars, in conjunction with CVPR 2009.
- 84 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.
- 85 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.
- 86 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 (ICIP), 2004.
- 87 I. Kokkinos, G. Evangelopoulos and P. Maragos, "Modulation-Feature based Textured Image Segmenation Using Curve Evolution.", In Proc. IEEE Int'l. Conf. on Image Processing (ICIP), 2004.

- 88 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.
- 89 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.

Theses

- 90 I. Kokkinos, Learning and Optimization for Shape-based representations, Habilitation à Diriger des Recherches (HDR), Université Paris-Est, 2013.
- 91 I. Kokkinos. Synergy between Image Segmentation and Object Recognition using Geometrical and Statistical Computer Vision Techniques, Ph.D. Thesis, School of Electrical and Computer Engineering, National Technical University of Athens, 2006.
- 92 I. Kokkinos. *Nonlinear Speech Processing Using Models for Chaotic Systems*, Diploma Thesis, School of Electrical and Computer Engineering, National Technical University of Athens, 2001.