

Activitats de Recerca

2015



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1. Research Personnel

1.1 Composition

As of 31 December 2015, CVC personnel who perform research activities are composed by:

POST-DOC RESEARCHERS (47):

- **Permanent (22):** including 4 senior researchers contracted by CVC and also 18 university professors from UAB, UB and UOC.
- **Postdoc contracts (25):** including Ramon y Cajal, Juan de la Cierva, Tecniosprings and Beatriu de Pinós, as well as those hired by the CVC and the UAB, UB and UOC universities.

PHD. STUDENTS (46): It includes any PhD student with a scholarship (CVC, UAB, FPI, DI or FI) or a contract as an assistant at the UAB, UB, or UOC.

INTERNSHIPS (46): During 2015, CVC hosted for periods between 2 and 4 months (within the academic year), young undergraduate or master students to develop a training stage in some of the CVC research groups. In some cases, these stages have been the introduction to research work.

1.2 SGR Groups

All researchers in CVC are members of a recognized research group (SGR), distinction given by the Generalitat de Catalunya:

TITLE: *Learning and Machine Perception (LAMP)*

REFERENCE: 2014 SGR 221

FUNDING ENTITY: AGAUR – Agència de Gestió d'Ajuts Universitaris i de Recerca

DURATION: 2014-2017

TOTAL AWARDED: 15.000,00 €

RESEARCHER: Dr. Joost van de Weijer

TITLE: *Research Lab on Image Sequence Evaluation (ISE Lab)*

REFERENCE: 2014 SGR 159

FUNDING ENTITY: AGAUR – Agència de Gestió d'Ajuts Universitaris i de Recerca

DURATION: 2014-2017

TOTAL AWARDED: No-finançat

RESEARCHER: Dr. Jordi González

TITLE: *Grup d'Anàlisi i Reconeixement d'Imatges de Documents (DAG)*

REFERENCE: 2014 SGR 1436

FUNDING ENTITY: AGAUR – Agència de Gestió d'Ajuts Universitaris i de Recerca

DURATION: 2014-2017

TOTAL AWARDED: 35.000,00 €

RESEARCHER: Dr. Josep Lladós

TITLE: *Advanced Driver Assistance Systems (ADAS)*

REFERENCE: SGR 2014 1506

FUNDING ENTITY: AGAUR – Agència de Gestió d'Ajuts Universitaris i de Recerca

DURATION: 2014-2017

TOTAL AWARDED: 30.000,00 €

RESEARCHER: Dr. Antonio López

TITLE: *Interactive Augmentend Machine Vision (IAMV)*

REFERENCE: 2014 SGR 1470

FUNDING ENTITY: AGAUR – Agència de Gestió d'Ajuts Universitaris i de Recerca

DURATION: 2014-2017

TOTAL AWARDED: No-finançat

RESEARCHER: Dr. Debora Gil

TITLE: *Color in Context Group (CVC)*

REFERENCE: 2014 SGR 1659

FUNDING ENTITY: AGAUR – Agència de Gestió d'Ajuts Universitaris i de Recerca

DURATION: 2014-2017

TOTAL AWARDED: No-finançat

RESEARCHER: Dr. Maria Vanrell

TITLE: *Computer Vision at the Universitat de Barcelona*

REFERENCE: 2014 SGR 1219

FUNDING ENTITY: AGAUR – Agència de Gestió d'Ajuts Universitaris i de Recerca

DURATION: 2014-2017

TOTAL AWARDED: 22.500,00 €

RESEARCHER: Dr. Petia Radeva

TITLE: *Grup de Visió i Aprenentatge Computacional (VCL)*

REFERENCE: 2014 SGR 561

FUNDING ENTITY: AGAUR – Agència de Gestió d'Ajuts Universitaris i de Recerca

DURATION: 2014-2017

TOTAL AWARDED: No-finançat

RESEARCHER: Dr. Oriol Pujol

TITLE: *Scene Understanding and Artificial Intelligence Lab (SUNAI)*

REFERENCE: 2014 SGR 564

FUNDING ENTITY: AGAUR – Agència de Gestió d'Ajuts Universitaris i de Recerca

DURATION: 2014-2017

TOTAL AWARDED: No-finançat

RESEARCHER: Dr. David Masip

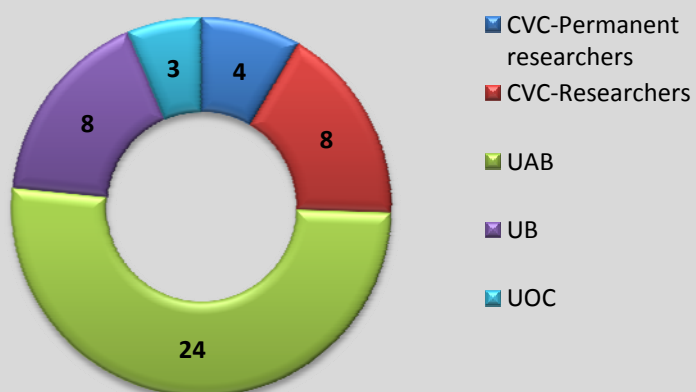
RESEARCHER PROFILE:

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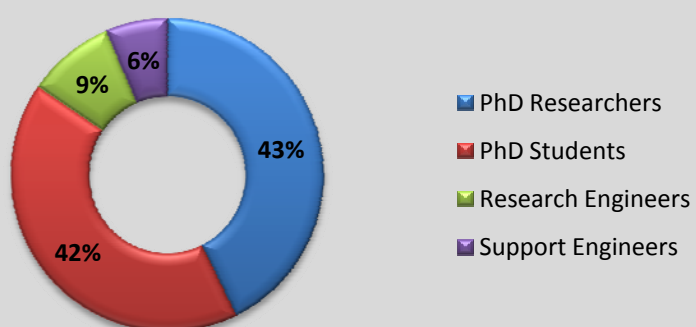
Postdoc Research profile:

- Professor titular
- 40 years-old
- h-index: 16

PhD researchers



Research Staff



2. Competitive Projects

2.1 Awarded in 2015

2.1.1 Research Projects

TITLE: *RAW - Leyendo en entornos no controlados: Explotando el contexto mútuo entre texto, escena y usuario para la lectura y la comprensión de la escena*

REFERENCE: TIN2014-52072-P

FUNDING ENTITY: Ministerio de Economía y Competitividad

DURATION: 01/01/2015-31/12/2017

TOTAL AWARDED: 109.021,00 €

PRINCIPAL INVESTIGATORS: Dr. Dimosthenis Karatzas, Dr. Andy Bagdanov

TITLE: *ACDC - Conducción automática y corporativa en Ciudad*

REFERENCE: TRA2014-57088-C2-1-R

FUNDING ENTITY: Ministerio de Economía y Competitividad

DURATION: 01/01/2015-31/12/2017

TOTAL AWARDED: 62.920,00 €

PRINCIPAL INVESTIGATORS: Dr. Antonio López, Dr. David Vázquez

TITLE: *Fire DMMI - Detección y Monitoreo de Incendios usando Imágenes Multiespectrales*

REFERENCE: TIN2014-56919-C3-R

FUNDING ENTITY: Ministerio de Economía y Competitividad

DURATION: 01/01/2015-31/12/2017

TOTAL AWARDED: 82.643,00 €

PRINCIPAL INVESTIGATORS: Dr. Angel Sappa, Dr. Felipe Lumbreras

TITLE: *MILE-TRANS, Estudio de las propiedades intrínsecas que permiten minimizar efectos de iluminación en sistemas inteligentes de transporte basados en visión*

REFERENCE: TIN2014-61068-R

FUNDING ENTITY: Ministerio de Economía y Competitividad

DURATION: 01/01/2015-31/12/2017

TOTAL AWARDED: 114.345,00 €

PRINCIPAL INVESTIGATORS: Dr. Maria Vanrell, Dr. Robert Benavente

TITLE: *EINES - Eines i procediments per a la informatització massiva de les fonts històriques de població*

REFERENCE: Recercaixa 2014

FUNDING ENTITY: ACUP – Obra Social “La Caixa”

DURATION: 28/02/2015-27/02/2017

TOTAL AWARDED: 78.391,06 €

PRINCIPAL INVESTIGATOR: Dr. Josep Lladós, Dr. Albert Esteve (CED)

TITLE: *Pla d'actuació 2015 de la unitat de comercialització tecnològica CVC*

REFERENCE: VALUNI15-1-0003

FUNDING ENTITY: ACCIÓ

DURATION: 01/01/2015-30/06/2016

TOTAL AWARDED: 58.282,00 €

RESPONSIBLE: Dr. Josep Lladós & Meritxell Bassolas

TITLE: *Pla d'actuació TECNIO 2015 CVC*
REFERENCE: TECCIT15-1-0001
FUNDING ENTITY: ACCIÓ
DURATION: 01/01/2015-31/12/2015
TOTAL AWARDED: 27.000,00 €
RESPONSIBLE: Dr. Josep Lladós & Meritxell Bassolas

TITLE: *SENSA: System for Endoscopy Stenosis Assessment*
REFERENCE: 2014 PROD 00065
FUNDING ENTITY: Agència d'Ajuts Universitaris i Recerca - AGAUR
DURATION: 31/07/2015-31/01/2017
TOTAL AWARDED: 46.330,05 €
PRINCIPAL INVESTIGATOR: Dr. Jorge Bernal

TITLE: *enruTAR - Definir un nou sistema d'ajuda la producció industrial en el cablejats elèctric*
REFERENCE: RD15-1-0115
FUNDING ENTITY: ACCIÓ
DURATION: 30/07/2015-30/07/2017
TOTAL AWARDED: 72.000,00 €
TEAM MEMBER: Dr. Marçal Rossinyol

TITLE: *NeViComp - Neurociencia Visual y Ciencias de la Computación*
REFERENCE: TIN2015-71130-REDT
FUNDING ENTITY: Ministerio de Economía y Competitividad
DURATION: 01/02/2015-31/12/2017
TOTAL AWARDED: 30.000,00 €
PRINCIPAL INVESTIGATOR: Dr. Xavier Otazu

TITLE: *RETEVI - Red Temàtica en Vehículos Inteligentes*
REFERENCE: TRA2015-69002-REDT
FUNDING ENTITY: Ministerio de Economía y Competitividad
DURATION: 01/12/2015-30/11/2017
TOTAL AWARDED: 30.000,00 €
TEAM MEMBER: Dr. Antonio López

TITLE: *SEE4C – SpatiotEmporal ForEcasting: Coopetition to meet Current Cross-modal Challenges*
REFERENCE: 688356
FUNDING ENTITY: European Commission
DURATION: 01/01/2016-30/06/2017
TOTAL AWARDED: 67.362,50 €
TEAM MEMBER: Dr. Sergio Escalera

TITLE: *De-identification for privacy protection in multimedia content*
REFERENCE: ICT COST Action IC1206
FUNDING ENTITY: COST
DURATION: 2015-2017
TEAM MEMBER: Dr. Jordi Gonzàlez

2.1.2 Recruitment and Mobility Scholarships and Grants

Pre-doc grants:

TITLE: *BECA FI 2015 - Ricard Balague*

REFERENCE: 2015 FI_B 00323

FUNDING ENTITY: AGAUR – Agència de Gestió d'Ajuts Universitaris i de Recerca

DURATION: 2015-2018

TOTAL AWARDED: 21.146,88 € (1 year)

HOLDER: Ricard Balagué

ADVISOR: Dr. Josep Lladós

TITLE: *Doctorat Industrial ICAR-UAB-CVC*

REFERENCE: 2014 DI 078

FUNDING ENTITY: AGAUR – Agència de Gestió d'Ajuts Universitaris i de Recerca

DURATION: 2015-2018

TOTAL AWARDED: 55.560,00 €

HOLDER: Albert Berenguel

ADVISOR: Dr. Josep Lladós

TITLE: *Beca FPI 2015- D.Bazazian*

REFERENCE: BES-2015-073105

FUNDING ENTITY: Ministerio de Ciencia y Competitividad

DURATION: 2016-2020

TOTAL AWARDED: 26.750,00 € (1year)

HOLDER: Dena Bazazian

ADVISORS: Dr. Dimosthenis Karatzas

TITLE: *Beca FPI 2015- H.Ahmed Sial*

REFERENCE: BES-2015-073722

FUNDING ENTITY: Ministerio de Ciencia y Competitividad

DURATION: 2016-2020

TOTAL AWARDED: 26.750,00 € (1 year)

HOLDER: Hassan Ahmed Sial

ADVISORS: Dr. Maria Vanrell, Dr. Robert Benavente

Post-doc grants:

TITLE: *Juan de la Cierva Formación 2014 – David Vázquez*

REFERENCE: FJCI-2014-19845

FUNDING ENTITY: Ministerio de Ciencia y Competitividad

DURATION: 2015-2017

TOTAL AWARDED: 25.000,00 € (1 year)

HOLDER: Dr. David Vázquez

TITLE: *DECARTS - DECision support system for ARTerial Stenting*

REFERENCE: TECSPR15-1-0027

FUNDING ENTITY: ACCIÓ

DURATION: 2016-2018

TOTAL AWARDED: 94.952,46 €

HOLDER: Dr. Karim Lekadir

Mobility grants:

TITLE: *Estancia breve – A. Gurguí*

REFERENCE: EEBB-I-2016-11525

FUNDING ENTITY: Ministerio de Ciencia y Competitividad

DURATION: 01/05/16-31/07/16

TOTAL AWARDED: 4.958,00 €

HOSTING INSTITUTION: University of Oxford

HOLDER: Antoni Gurguí

TITLE: *P-SPHERE - Opening Sphere UAB-CEI to PostDoctoral Fellows*

REFERENCE: 665919

FUNDING ENTITY: European Commission

DURATION: 2015-2020

TOTAL AWARDED: Personnel cost

TEAM MEMBER: Dr. Josep Lladós

2.2 In execution in 2015.

2.2.1 Research projects.

TITLE: *Movimiento Acostumbrado de los Peatones: Estudio para Atajar los Atropellos (MAPEA2)*

REFERENCE: SPIP20141352

FUNDING ENTITY: MINISTERIO DEL INTERIOR

DURATION: 2014 – 2015

TOTAL AWARDED: 48.841,00 €

PRINCIPAL INVESTIGATOR: Dr. Antonio López

TITLE: *Closing the loop: bio-inspired top-down feedback for computational vision systems*

REFERENCE: TIN2013-41751-P

FUNDING ENTITY: Ministerio de Economía y Competitividad

DURATION: 2014-2016

TOTAL AWARDED: 77.001,38 €

PRINCIPAL INVESTIGATOR: Dr. Xavier Otazu / Dr. Joost van de Weijer

TITLE: *Accurate color measurements from hand-held devices*

REFERENCE: TIN2013-50550-EXP

FUNDING ENTITY: Ministerio de Economía y Competitividad

DURATION: 2014-2015

TOTAL AWARDED: 36.300,00 €

PRINCIPAL INVESTIGATOR: Dr. Joost van de Weijer

TITLE: *Beauty is in the AI of the beholder: computer vision meets neuro-visual aesthetics*

REFERENCE: TIN2013-49982-EXP

FUNDING ENTITY: Ministerio de Economía y Competitividad

DURATION: 2014-2017

TOTAL AWARDED: 60.500,00 €

PRINCIPAL INVESTIGATOR: Dr. Alejandro Parraga

TITLE: *CONSOLIDER REDES EXCELENCIA (R-MIPRCV)*

REFERENCE: TIN2014-54728-REDC

FUNDING ENTITY: Ministerio de Economía y Competitividad

DURATION: 2014-2016

TOTAL AWARDED: 37.000,00 €

CVC PRINCIPAL INVESTIGATOR: Dr. Angel Sappa

TITLE: *Plataforma “Better at home”.Solución integral de teleasistencia (indoor & outdoor) basada en monitorización mediante sensores, sistemas de autoaprendizaje y tecnología móvil*

REFERENCE: RTC-2014-2148-1

FUNDING ENTITY: Ministerio de Economía y Competitividad

DURATION: 2014-2016

TOTAL AWARDED: 116.183,00 €

PRINCIPAL INVESTIGATOR: Dr. Sergio Escalera

TITLE: *NeuroChild Eyetracking: Rehabilitación cognitiva de Niños con Daño Cerebral Adquirido basada en Serious Games para dispositivos móviles y con control visual de atención*

REFERENCE: RTC-2014-2228-1

FUNDING ENTITY: Ministerio de Economía y Competitividad

DURATION: 2014-2016

TOTAL AWARDED: 101.640,00 €

PRINCIPAL INVESTIGATOR: Dr. Sergio Escalera

TITLE: *Document analysis and knowledge modeling for cultural heritage actions in Pyrenees – (CTP-DGR)*

REFERENCE: 2014 CTP 00052

FUNDING ENTITY: AGAUR – Agència de Gestió d'Ajuts Universitaris i de Recerca

DURATION: 2015-2016

TOTAL AWARDED: 5.000,00 €

PRINCIPAL INVESTIGATOR: Dr. Oriol Ramos

TITLE: *Care respite: monitorització visual intel·ligent de persones dependents*

REFERENCE: RD14-1-0102

FUNDING ENTITY: ACCIÓ

DURATION: 2015-2016

TOTAL AWARDED: 5.000,00 €

PRINCIPAL INVESTIGATOR: Dr. Sergio Escalera

TITLE: *Valorització d'un dispositiu mèdic per la classificació de càlculs renals*

REFERENCE: VALTEC13-1-0148

FUNDING ENTITY: ACCIÓ

DURATION: 2014-2015

TOTAL AWARDED: 43.016,00 €

PRINCIPAL INVESTIGATOR: Dr. Joan Serrat & Dr. Felipe Lumbreras

TITLE: *PRAGMATA - Desarrollo de la Hermenéutica Visual en la Interpretación de Imágenes.*

REFERENCE: TIN2012-39051

FUNDING ENTITY: Ministerio de Economía y Competitividad

DURATION: 2012-2015

TOTAL AWARDED: 90.768,60 €

PRINCIPAL INVESTIGATOR: Dr. Xavier Roca

TITLE: *Co-READ - Reconocimiento Contextual en Documentos Antiguos*

REFERENCE: TIN2012-37475-C02-02

FUNDING ENTITY: Ministerio de Economía y Competitividad

DURATION: 2012-2015

TOTAL AWARDED: 88.639,20 €

PRINCIPAL INVESTIGATOR: Dr. Josep Lladós

TITLE: *FISIOLOGICA - Integración de datos anatómico-funcionales mediante mapas de coordenadas normalizados basados en marcadores fisiológicos.*

REFERENCE: TIN2012-33116

FUNDING ENTITY: Ministerio de Economía y Competitividad

DURATION: 2012-2015

TOTAL AWARDED: 116.020,71 €

PRINCIPAL INVESTIGATOR: Dr. Debora Gil

TITLE: *ViDAS-UrbE - Sistemas de Visión por Computador para la Asistencia a la Conducción en Entornos Urbanos.*

REFERENCE: TRA2011-29454-C03-01

FUNDING ENTITY: Ministerio de Ciencia e Innovación

DURATION: 2011-2015

TOTAL AWARDED: 87.120,00 €

PRINCIPAL INVESTIGATOR: Dr. Antonio M. López

TITLE: *FireWatcher - Monitorización de Incendios Mediante la Inspección Aérea del Terreno.*

REFERENCE: TIN2011-29494-C03-02

FUNDING ENTITY: Ministerio de Ciencia e Innovación

DURATION: 2011-2015

TOTAL AWARDED: 32.186,00 €

PRINCIPAL INVESTIGATOR: Dr. Daniel Ponsa

TITLE: *Election Optical Tabulator*

REFERENCE: TSI-100400-2013-67

FUNDING ENTITY: Ministerio de Industria, Energía y Turismo

DURATION: 2013-2018

TOTAL AWARDED: 150.082,90 €

PRINCIPAL INVESTIGATOR: Dr. Alícia Fornés

TITLE: *5CofM—Five Centuries of Marriages.*

REFERENCE: Project Number 269796

FUNDING ENTITY: UE

DURATION: 2011-2016

TOTAL AWARDED: 396.800,00 €

CVC PRINCIPAL INVESTIGATOR: Dr. Josep Lladós (Principal investigator: Dr. Anna Cabré)

TITLE: *The European Network on Integrating Vision and Language (iV&L Net): Combining Computer Vision and Language Processing For Advanced Search, Retrieval, Annotation and Description of Visual Dataction*

REFERENCE: IC 1307

FUNDING ENTITY: COST

DURATION: 2014-2018

RESEARCHERS: Dr. Jordi González & Dr. Sergio Escalera

2.2.2 Recruitment and mobility

Pre-doc grants:

TITLE: *Doctorat Industrial SCYTL-UAB-CVC*

REFERENCE: 2013 DI 067

FUNDING ENTITY: AGAUR – Agència de Gestió d'Ajuts Universitaris i de Recerca

DURATION: 2014-2017

TOTAL AWARDED: 66.180,00 €

HOLDER: Juan Ignacio Toledo

ADVISOR: Dr. Josep Lladós / Dr. Alicia Fornés

TITLE: *Doctorat Industrial CATUAV-UAB-CVC*

REFERENCE: 2014 DI 024

FUNDING ENTITY:

DURATION: 2014-2017

TOTAL AWARDED: 55.560,00 €

HOLDER: Jordi Salvador

ADVISOR: Dr. Felipe Lumbreras / Dr. Angel Sappa

TITLE: *Beca FI*

REFERENCE: 2014 FI_B1 00151

FUNDING ENTITY: AGAUR – Agència de Gestió d'Ajuts Universitaris i de Recerca

DURATION: 2014-2017

TOTAL AWARDED 2015: 15.600,00 €

HOLDER: Meysam Madadi

ADVISOR: Dr. Jordi González / Dr. Sergio Escalera

TITLE: *Beca FI*

REFERENCE: 2015FI_B2 00101

FUNDING ENTITY: AGAUR

DURATION: 2013-2016

TOTAL AWARDED 2015: 15.600 €

HOLDER: Lluís Gómez

ADVISOR: Dr. Dimosthenis Karatzas

TITLE: *Beca FI*

REFERENCE: 2014FI_B2 00159

FUNDING ENTITY: AGAUR

DURATION: 2012-2015

TOTAL AWARDED 2015: 15.600 €

HOLDER: Simeon Petkov

ADVISOR: Dr. Carlo Gatta

TITLE: *Beca FPI 2013*

REFERENCE: BES-2013-063756

FUNDING ENTITY: Ministerio de Economía y Competitividad

DURATION: 2014-2017

TOTAL AWARDED: 20.600,00 €

HOLDER: Antoni Gurguí

ADVISOR: Dr. Debora Gil

Support Technician grant:

TITLE: *Técnicos de Apoyo 2012*

REFERENCE: PTA2012-8115-E

FUNDING ENTITY: Ministerio de Economía y Competitividad

DURATION: 2013-2016

TOTAL AWARDED: 48.000,00 €

HOLDER: Raul Alcaide

ADVISORS: Dr. David Rotger / Meritxell Bassolas

Post-doc grants:

TITLE: *AVAL-DOC Advances in Automatic Valorisation of Administrative Document Contents*

REFERENCE: TECSPR13-1-0017

FUNDING ENTITY: ACCIÓ

DURATION: 2014-2015

TOTAL AWARDED: 95.838,68 €

HOLDER: Dr. Marçal Rossinyol

TITLE: *OSP: The Open Solution Platform*

REFERENCE: TECSPR14-1-0005

FUNDING ENTITY: ACCIÓ

DURATION: 2015-2017

TOTAL AWARDED: 100.920,59 €

HOLDER: Dr. Ariel Amato

TITLE: *Beatriu de Pinós 2013*

REFERENCE: 2013 BP_B 00263

FUNDING ENTITY: AGAUR – Agència de Gestió d'Ajuts Universitaris i de Recerca

DURATION: 2014-2016

TOTAL AWARDED: 91.022,40 €

HOLDER: Dr. Maria Dimiccoli

3. PhD Thesis

Hongxing Gao: *"Focused Structural Document Image Retrieval in Digital Mailroom Applications"*

CVC, January 16, 2015

Advisors: Dr. Josep Lladós (CVC-UAB), Dr. Dimosthenis Karatzas (CVC-UAB), Dr. Marçal Rossinyol (CVC)

Antonio Hernández Vela: *"From pixels to gestures: learning visual representations for human analysis in color and depth data sequences"*

CVC-UB, March 9, 2015

Advisors: Dr. Sergio Escalera (CVC-UB) and Prof. Stan Sclaroff (Boston University)

Jiaolong Xu: *"Domain Adaptation of Deformable Part-based Models"*

CVC, April 24, 2015

Supervisor: Dr. Antonio López (CVC-UAB)

David Roche: *"A Statistical Framework for Terminating Evolutionary Algorithms at their Steady State"*

CVC-UAB, July 24, 2015

Advisors: Dr. Debora Gil (CVC-UAB) and Dr. Jesús Giraldo (UAB)

Patricia Márquez: *"A Confidence Framework for the Assessment of Optical Flow Performance"*

CVC, July 27, 2015

Advisors: Dr. Debora Gil (CVC-UAB) and Dr. Aura Hernández (CVC-UAB)

Marc Serra: *"Modeling, estimation and evaluation of intrinsic images considering color information"*

CVC-UAB, September 10, 2015

Advisors: Dr. Robert Benavente (CVC-UAB) and Dr. Olivier Penacchio (University of St. Andrews)

Adriana Romero: *"Assisting the training of deep neural networks with applications to computer vision"*

CVC-UB, October 2, 2015

Advisors: Dr. Carlo Gatta (CVC) and Dr. Petia Radeva (CVC-UB)

Sergio Vera: *"Atomic Registration based on Medial Axis Parametrizations"*

CVC-UAB, November 20, 2015

Advisors: Dr. Debora Gil (CVC-UAB) and Dr. Miguel Ángel González Ballester (UPF)

Joan Manel Núñez: *"Vascular Pattern Characterization in Colonoscopy Images"*

CVC-UAB, November 27, 2015

Advisor: Dr. Fernando L. Vilariño Freire (CVC-UAB)

Alejandro González: *"Multi-modal Pedestrian Detection"*

CVC-UAB, November 30, 2015

Advisors: Dr. David Vázquez (CVC) and Dr. Antonio M. López (CVC-UAB)

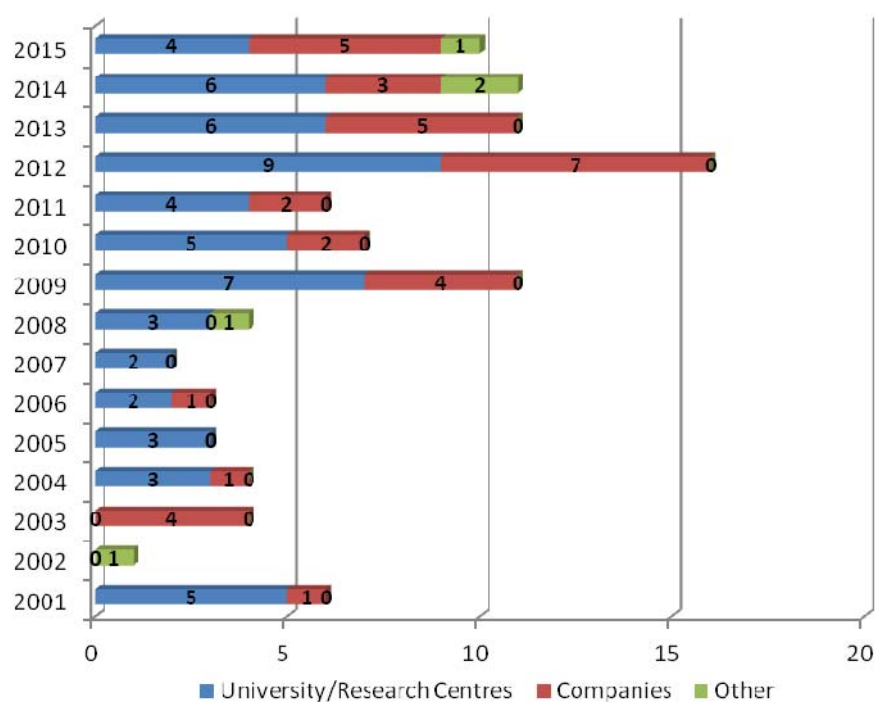


10 new doctors in 2015

Distribution of new PhD in 2015:

- **Universities and Research Centres (4):** Universitat Autònoma de Barcelona, Université de Montreal, La Salle – Ramon Llull, Aviation University of Changchun
- **Companies (5):** Hewlett- Packard, Schibsted, Ubisoft Barcelona Mobile, Exxiple Studio, Cannon Research Beijing

PhD destination 2001-2015



4. Master thesis and Master projects

- **Ciprian Corneau**, *"Facial expression analysis of neurological affected children"*, CVC, July 16, 2015
Advisors: Dr. Sergio Escalera (CVC-UB), Dr. Jordi González (CVC-UAB) and Marc Oliu (CVC)
- **Laura López**, *"Automatic detection and enhancement of features"*, CVC, July 16, 2015
Advisors: Dr. Andrew D. Bagdanov (CVC)
- **Esteve Cervantes**, *"Evaluating deep features for fashion recognition"*, CVC, September 16, 2015
Advisors: Dr. Joost van de Weijer (CVC) and Dr. Andrew D. Bagdanov (CVC)
- **Xim Cerdà**, *"Biologically Plausible Image Descriptor for Object Classification"*, CVC, September 18, 2015
Advisors: Dr. Xavier Otazu (CVC-UAB) and Dr. Carlo Gatta (CVC)
- **Daniel Hernández**, *"A comparison of perceptual image quality metrics"*, CVC, September 18, 2015
Advisors: Dr. Alejandro Pàrraga (CVC-UAB) and Dr. Xavier Otazu (CVC-UAB)
- **Gemma Rotger**, *"A comparative study of renal calculi classification according to their morphology using machine vision techniques"*, CVC, September 18, 2015
Advisors: Dr. Felipe Lumbreras (CVC-UAB) and Dr. Joan Serrat (CVC-UAB)
- **Marta Expósito**, *"Including 'ugly' features to improve aesthetic judgment prediction in natural images"*, CVC, September 18, 2015
Advisor: Dr. Alejandro Pàrraga (CVC-UAB)
- **Sounak Dey**, *"Local Binary Pattern based fast information spotting in large-scale document databases"*, CVC, September 18, 2015
Advisor: Dr. Josep Lladós (CVC-UAB)
- **Marc Masana**, *"Context-based pruning for scalable object detection"*, CVC, September 18, 2015
Advisors: Dr. Joost van de Weijer (CVC) and Dr. Andrew D. Bagdanov (CVC)
- **Gabriel Villalonga**, *"Dynamic City Maps with Pedestrian Behaviors Statistics"*, CVC, September 18, 2015
Advisor: Dr. Antonio M. López

5. Research stays: outgoing

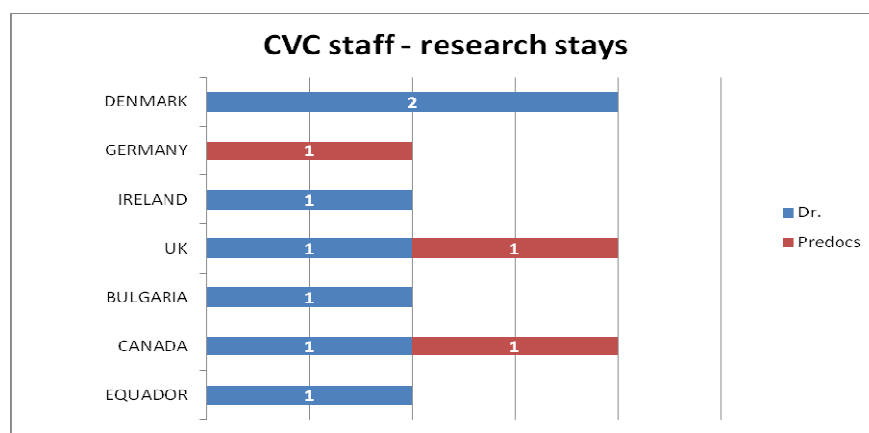
During 2015, CVC's research staff had carried out 10 research stays in labs outside Spain. Of these, 3 were in centers in America and 7 in Europe.

Postdoctoral (7):

- **Dr. Angel Sappa**, Facultad de Ingeniería en Electricidad y Computación, Escuela Superior Politécnica del Litoral (ESPOL), Quayaquil (Ecuador), January to December 2015 (sabbatical leave)
- **Dr. Sergio Escalera**, Aalborg University (Denmark), January to July 2015
- **Dr. Xavier Otazu**, School of Psychology and Neuroscience, University of St. Andrews (Scotland), March 1 to May 31, 2015
- **Dr. Carlo Gatta**, LISA Lab, University of Montreal (Canada), May 4 to July 31, 2015
- **Dr. Katherine Díaz**, ECIT – Queen's University of Belfast (Irlanda), July 2015
- **Dr. Jordi González**, Research Group Visual Analysis of People Lab, Department of Architecture, Design and Media Technology, Aalborg University (Denmark), August 2015
- **Dr. Mariella Dimiccoli**, Imagga Ltd. (Bulgaria), September 28 to October 12, 2015

Predoctoral (3):

- **Adriana Romero**, Département d'Informatique et Recherche Opérationnelle, Université de Montreal, August 1, 2014 – January 31, 2015. Supervisor: Prof. Yoshua Bengio
- **Núria Cirera**, Technische Universität Dortmund (Germany), June 1 – July 31 and September 1-30, 2015. Supervisor: Prof. Gernot A. Fink
- **Germán Ros**, Computer Vision Group, Toshiba Research Europe, Cambridge (UK), May 25 – September 1, 2015. Supervisors: Dr. Pablo Alcantarilla & Dr. Bjorn Stenger.



6. Research stays: incoming

During 2015, we received 25 researchers coming from other centers and institutions. Of these, just 2 of them came from other universities in Spain. The rest were from centres in Europe (17), and Asia (6).

Postdoctoral (5):

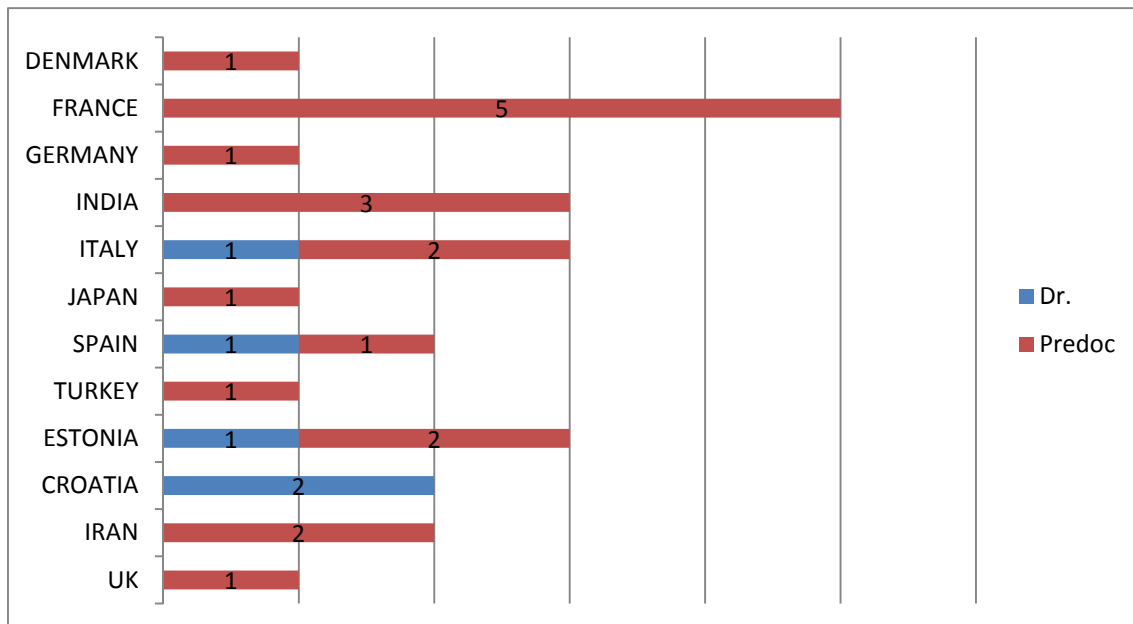
- Dr. Antonio Fernández, Universidade de Vigo, April to June 2015. Visiting researcher in **ADAS group**
- Dr. Marina Ivasic-Kos, Universitat of Rijeka (Croatia) in the Cost Action “Image and Language” framework. May 19-May 25, 2015. Visiting researcher in **ISE group**
- Dr. Miran Pobar, Universitat of Rijeka (Croatia) in the Cost Action “Image and Language” framework. May 19-May 25, 2015. Visiting researcher in **ISE group**
- Dr. Andrea Albarelli, Dipartimento Scienze Ambientali Informatica e Statistica, Università Ca' Foscari Venezia. May 1 – August 31, 2015. Visiting researcher in **DAG group**
- Dr. Gholamreza Anbarjafari, ICV Group, IMS Lab – Institute of Technology, University of Tartu (Estonia). August 23 - September 10, 2015. Visiting researcher in **HuPBA group**

Predoctoral (20):

- Monica Benigni, Scuola di Ingegneria, Università degli Studi di Firenze (Italy), July 2, 2014 to January 31, 2015. Stay with **LAMP group**, supervisor: **Dr. Andrew D. Bagdanov**
- Mikkel Thoegersen, Aalborg University (Denmark), September 2014 to February 2015. Stay with **ISE group**, supervisor: **Dr. Jordi González**
- Takuro Okada, Osaka Prefecture University (Japan), October 7, 2014 to February 28, 2015. Stay with **DAG group**, supervisors: **Dr. Dimosthenis Karatzas and Dr. Josep Lladós**
- Daniele Pezzatini, Media Integration and Communication Center (MICC), Università degli Studi di Firenze (Italy), January 26 to April 11, 2015. Stay with **LAMP Group**, supervisor: **Dr. Andrew D. Bagdanov**
- Sravana Jyothi Narayanaraju, Sastra University (India), February 5 to June 17, 2015, as a part of the Semester Abroad Program (SAP). Stay with **LAMP group**, supervisor: **Dr. Bogdan Raducanu**
- Chandrakant Khandelwal (India), Master student Mathmods – Erasmus mundus in Mathematical Modelling in Engineering: Theory, Numerics, Applications, March 2 to September 1, 2015. Stay with **DAG group**, supervisor: **Dr. Oriol Ramos**
- Aurelio Ponz, Universidad Carlos III, Madrid, April 1 to September 4, 2015. Stay with **ADAS group**, supervisor: **Dr. Antonio López**
- Julien Poujol, Université Paul- Sabatier, Toulouse (France), April 1 to July 24 2015. Stay with **ADAS group**, supervisor: **Dr. Angel Sappa**
- Etienne Danos, Université Paul- Sabatier, Toulouse (France), April 1 to July 24, 2015. Stay with **ADAS group**, supervisor: **Dr. Angel Sappa**
- Nicole Walaseck, University of Osnabrück, Osnabrück (Germany), June 13 to October 15, 2016. Stay with **LAMP group**, supervisor: **Dr. Joost van de Weijer**

- Quoc Bao Dang, Laboratoire L3i, Université de La Rochelle (France). May to July 2015. Stay with **DAG group**, supervisor: **Dr. Marçal Rossinyol**
- Thanh Nam Le, Laboratoire L3i, Université de La Rochelle (France). June 1 to August 1 2015. Stay with **DAG group**, supervisor: **Dr. Josep Lladós**
- Atif Emre Ofluoglu, Middle East Technical University, Ankara (Turkey). June, 10 to August 10, 2015. Stay with **HuPBA group**, supervisor: **Dr. Sergio Escalera**
- Andres Traumann, IMS Lab – Institute of Technology, University of Tartu (Estonia). June 18 to September, 2015. Stay with **HuPBA group**, supervisor: **Dr. Sergio Escalera**
- Pouya Monfared (Iran), Master Student – Computer Engineering UAB. Juny 22 to December 22, 2015. Stay with **HuPBA group**, supervisor: **Dr. Sergio Escalera**
- Ashraful Alam Milton (India), Master student – Computer Engineering UAB, July 16 to September, 2015. Stay with **ADAS group**, supervisor: **Dr. David Vázquez**
- Andrews Cordolino, Université de La Rochelle (France), June 3 to July 31, 2015. Stay with **ISE group**, supervisor: **Dr. Jordi González**
- Shahab Anbarjafari, ICV Group, IMS Lab – Institute of Technology, University of Tartu (Estonia), August 24 to September 12, 2015. Stay with **HuPBA group**, supervisor: **Dr. Sergio Escalera**
- Azadez Sadat Mozafari, Sharif University of Technology (Iran), September 14, 2015 to March 13, 2016. Stay with **ADAS group**, supervisor: **Dr. Antonio Lopez**
- Dimitris Mylonas, University College of London, London (UK), October 13 to 18, 2015. Stay with **LAMP group**, supervisor: **Dr. Joost van de Weijer**

5 Postdocs/20 Predocs



7. Courses, Tutorials and Invited Talks by CVC personnel

TUTORIALS:

Title: *Color Constancy & Color-texture description* (6 h), in Master Erasmus Mundus CIMET (Color in Informatics and Media Technology), organized by Université Jean Monnet, Universidad de Granada, University of Eastern Finland and Gjøvik University College

Lecturer: Dr. Maria Vanrell – Computer Vision Center & UAB

Place: Universidad de Granada (Spain)

Date: May 18 to 21, 2015

Title: *Reconocimiento Facial y Técnicas Biométricas*, in Master de Criminalística UAB

Lecturer: Dr. Bogdan Raducanu – Computer Vision Center

Place: CVC

Date: May 29, 2015

Title: *Deep Learning and LifeLogging – how far are we from being able to explain person's lifestyle using Computer Vision?*, invited Tutorial at 16th International Conference on Computer Analysis of Images and Patterns (CAIP'2015)

Lecturer: Dr. Mariella Dimiccoli and Dr. Petia Radeva, Computer Vision Center & UB

Place: CVC

Date: August 31, 2015

INVITED TALKS:

Title: *Color Features in the Era of Big Data*, in The Fifth Computational Color Imaging Workshop (CCIW 2015)

Lecturer: Dr. Joost van de Weijer, Computer Vision Center

Place: Saint Etienne (France)

Date: March 25, 2015

Title: *Ordinadors d'avui, xarxes socials del passat*, Arxiu Comarcal del Baix Llobregat

Lecturer: Dr. Josep Lladós, Computer Vision Center & UAB

Place: Sant Feliu de Llobregat (Spain)

Date: April 16, 2015

Title: *Autonomous Vehicles*, Pint of Science

Lecturer: Dr. David Vázquez, Computer Vision Center

Place: Barcelona (Spain)

Date: April 21, 2015

Title: *Mathematicians meet bronchoscopists*, in 3rd European Congress for Bronchology and Interventional Pulmonology (ECBIP 2015)

Lecturer: Dr. Debora Gil, Computer Vision Center & UAB

Place: Barcelona (Spain)

Date: April 24, 2015

Title: *ACDC: Automated and Cooperative Driving in the City*, in Salón Internacional del Automóvil
Lecturer: Dr. Antonio López, Computer Vision Center & UAB
Place: Barcelona (Spain)
Date: May 14, 2015

Title: *Robust Reading*, in 3rd International Document Image Processing Summer School
Lecturer: Dr. Dimosthenis Karatzas, Computer Vision Center & UAB
Place: Kefalonia (Greece)
Date: June, 2015

Title: *Document Image Analysis*, in VISion Understanding and Machine Intelligence Summer School (VISUM)
Lecturer: Dr. Alícia Fornés, Computer Vision Center
Place: Oporto (Portugal)
Date: July, 2015

Title: *Edición digital y tratamiento de Imágenes*, in Escuela de verano. Introducción a la edición digital académica
Lecturer: Dr. Alícia Fornés, Computer Vision Center
Place: Madrid (Spain)
Date: July, 2015

Title: *The Library Living Lab – Creating a Quadruple Helix Open Innovation Space*, in “Smart cities”: espais, empresa, ciutadania i territori
Lecturer: Dr. Dimosthenis Karatzas, Computer Vision Center & UAB
Place: Barcelona (Spain)
Date: July, 2015

Title: *Learning to see in Virtual Worlds*, in Interaction of Automated Vehicles with other Traffic Participants ITSC 2015 Workshop, in conjunction with 2015 IEEE International Conference on Intelligent Transportation Systems
Lecturer: Dr. Antonio López, Computer Vision Center & UAB
Place: Las Palmas de Gran Canaria (Spain)
Date: September 15, 2015

Title: *Deep Learning: A new paradigm in Computer Vision*, Institute of Systems Engineering and Robotics, Bulgarian Academy of Science
Lecturer: Dr. Mariella Dimiccoli, Computer Vision Center
Place: Sofia (Bulgaria)
Date: October 11, 2015

Title: *Visión por computador aplicada al análisis de documentos históricos*, II Congreso Internacional de Humanidades Digitales Hispánicas (HDH'2015)
Lecturer: Dr. Alícia Fornés, Computer Vision Center
Place: Madrid (Spain)
Date: October, 2015

Title: *La gent de Sant Feliu de Llobregat dedicada als oficis i a la indústria a través dels padrons municipals d'habitants*, Arxiu Comarcal del Baix Llobregat

Lecturer: Dr. Josep Lladós, Computer Vision Center & UAB

Place: Sant Feliu de Llobregat (Spain)

Date: October 27, 2015

Title: *Intelligent Systems for Colonoscopy*, in ETIS Seminars, Grande École d'ingénieurs généraliste en électronique

Lecturer: Dr. Jorge Bernal, Computer Vision Center & UAB

Place: Cergy (France)

Date: November 3, 2015

Title: *Learning to see in Virtual Worlds*, at University of Alcalá

Lecturer: Dr. David Vázquez, Computer Vision Center

Place: Alcalá de Henares (Madrid)

Date: November 21, 2015

Title: *Word Spotting Tools in Genealogy Retrieval from Historical Handwritten Records*, at Computer Vision and Pattern Recognition Unit, Indian Statistical Institute

Lecturer: Dr. Josep Lladós, Computer Vision Center & UAB

Place: Kolkata (India)

Date: December 9, 2015

Title: *Learning to see in Virtual Worlds*, in Computer Vision for Road Scene Understanding and Autonomous Driving Workshop at ICCV'2015

Lecturer: Dr. Antonio López, Computer Vision Center & UAB

Place: Santiago de Chile (Chile)

Date: December 12, 2015

8. Training activities organized by CVC members

Title: *Couse on Deep Learning*

Organized by: Dr. Joost van de Wijer, Germán Ros, Marc Masana & Yaxing WangFlorent Perronin, Xerox Research Centre Europe, Meylan (France)

Place: CVC, Bellaterra

Date: July 22, 2015

Title: *IVL-Net Training School*

Co-organizer: Dr. Jordi Gonzàlez

Place: University of Leuven (Belgium)

Date: June 1-4, 2015

CVCRD 2015. Tenth CVC Workshop on Computer Vision. Trends and Challenges.

Place: CVC

Date: July 17, 2015

2nd Annual Catalan Meeting in Computer Vision – ACMCV 2015

Meeting Chairs: X. Binefa (UPF), Verónica Vilaplana (UPC), **David Masip** (UOC) and **Maria Vanrell** (CVC-UAB)

Organizing Chairs: **David Vázquez** (CVC), Ramon Morros (UPC) and Javier Vázquez (UPF)

Place: Poblenou Campus UPF, Barcelona

Date: September 18, 2015

9. Invited Talks at CVC

Applications to Annotation and Retrieval

Speaker: Prof. C. V. Jawahar

Affiliation: Center for Visual Information Technology (CVIT), at IIIT Hyderabad (India)

Date: January 15, 2015

Document Image Classification and Retrieval

Speaker: Dr. David Doermann

Affiliation: University of Maryland, Institute for Advanced Computer Studies, College Park - Maryland USA

Date: January 16, 2015

Considering the camera imaging pipeline for color image processing: Color stabilization, blind gamma estimation, and color characterization

Speaker: Dr. Javier Vázquez-Corral

Affiliation: Universitat Pompeu Fabra, Barcelona (Spain)

Date: January 28, 2015

Object detection with incomplete supervision

Speaker: Dr. Jakob Verbeek

Affiliation: Lear Team, Inria, Grenoble (France)

Date: February 13, 2015

Large-scale visual recognition. Invited talk in the Master in Computer Vision 2014-2015

Speaker: Dr. Naila Murray

Affiliation: Xerox Research Centre Europe (France)

Date: March 25, 2015

From corporate research to star-ups: chronicles from an ongoing journey. Invited talk in the Master in Computer Vision 2014-2015

Speaker: Dr. Luca Marchesotti

Affiliation: Beautifeye Ltd., Dublin (Ireland)

Date: March 25, 2015

3D pose and shape from monocular images

Speaker: Dr. Francesc Moreno

Affiliation: Institut de Robòtica i Informàtica Industrial, Barcelona (Spain)

Date: April 24, 2015

Game Theory for as a Tool for Inlier Selection

Speaker: Dr. Andrea Albarelli

Affiliation: KIIS Research Center at Università Ca' Foscari, Venezia (Italy)

Date: May 6, 2015

La realitat de mercat en l'àmbit de visió en robots. Invited talk in the Bachelor of Computer Science, Computation mention

Speaker: Carles Soler

Affiliation: NELMIA, Fundació Educabot and organizer of VEX Robotics competition - Spain

Date: May 3, 2015

Structural Models for Deformable Shape Recognition

Speaker: Dr. Andrea Torselli

Affiliation: KIIS Research Center at Univesità Ca'Foscari, Venezia (Italy)

Date: July 3, 2015-07-13

Teaching Computers to See

Speaker: Dr. Antonio Torralba

Affiliation: Computer Science and Artificial Intelligence Laboratory, Massachusetts Institute of Technology, Cambridge MA (USA)

Date: July 9, 2015

Deep Fishing: Extractin Gradient Features from Deep Nets / LEWIS: Latent Embeddings for Word Images and their Semantics

Speaker: Dr. Albert Gordo

Affiliation: Computer Vision Group at Xerox XRCE, Grenoble (France)

Date: July 13, 2015

Advances in Statistical Machine Translation in the last 10 years

Speaker: Dr. Marta Ruiz Costa-Jussà, Ramón y Cajal researcher

Date: July 21, 2015

Spectral Edge Image Fusion: Theory and Practice

Speaker: Dr. David Connah

Affiliation: School of Media, Design and Technology, University of Bradford (U.K.)

Date: September 10, 2015

Assisting the training of deep neural networks with applications to Computer Vision

Speaker: Adriana Romero

Affiliation: CVC-UB

Date: September 25, 2015

An Active Search Strategy for Efficient Object Class Detection

Speaker: Dr. Abel González García

Affiliation: University of Edinburgh (UK)

Date: October 2, 2015

What is a Living Lab?

Speaker: Artur Serra i Hurtado

Affiliation: i2Cat

Date: October 26, 2015

Looking at / Sensing People

Speaker: Dr. Yoannis Patras

Affiliation: Queen Mary University of London (UK)

Date: November 11, 2015

Image guided robotics for cardiac surgery

Speaker: Dr. Aleksandra Popovic

Affiliation: Philips (USA)

Date: November 26, 2015

Leave-One-Out Kernel Optimization for Shadow Detection

Speaker: Tomás F. Yago Vicente

Affiliation: Image Analysis Lab, Stony Brook University (N.Y., USA)

Date: November 27, 2015

Multiscale Combinatorial Grouping for Image Segmentation and Object Proposal Generation

Speaker: Dr. Jordi Pont-Tuset

Affiliation: Computer Vision Lab, ETH Zürich (Switzerland)

Date: November 30, 2015

Active Pedestrian Safety 2.0

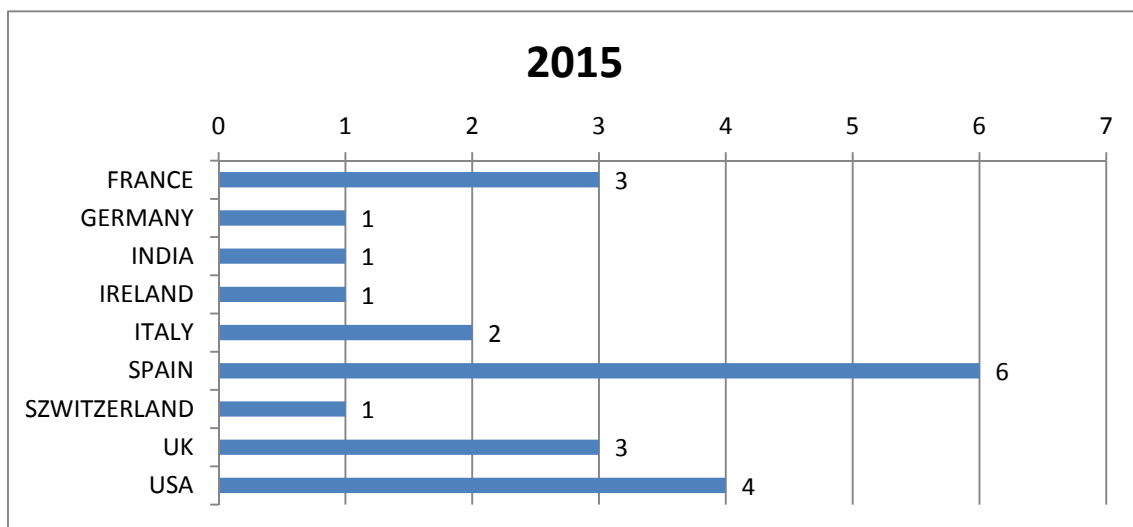
Speaker: Fabian Flohr

Affiliation: Daimler AG, Stuttgart (Germany)

Date: December 9, 2015

**6 from
Spanish
institutions**

**16 from
foreign
institutions**



10. Publications

2.3 Books (10)

1. Adriana Romero. *"Assisting the training of deep neural networks with applications to computer vision"*. Ph.D. thesis, Ediciones Gráficas Rey, 2015.
2. Alejandro Gonzalez Alzate. *"Multi-modal Pedestrian Detection"*. Ph.D. thesis, Ediciones Gráficas Rey, 2015.
3. Antonio Hernandez. *"From pixels to gestures: learning visual representations for human analysis in color and depth data sequences"*. Ph.D. thesis, Ediciones Gráficas Rey, 2015.
4. David Roche. *"A Statistical Framework for Terminating Evolutionary Algorithms at their Steady State."* Ph.D. thesis, Ediciones Gráficas Rey, 2015.
5. Hongxing Gao. *"Focused Structural Document Image Retrieval in Digital Mailroom Applications."* Ph.D. thesis, Ediciones Gráficas Rey, 2015.
6. Jiaolong Xu. *"Domain Adaptation of Deformable Part-based Models."* Ph.D. thesis, Ediciones Gráficas Rey, 2015.
7. Joan M. Nuñez. *"Vascular Pattern Characterization in Colonoscopy Images."* Ph.D. thesis, Ediciones Gráficas Rey, 2015.
8. Marc Serra. *"Modeling, estimation and evaluation of intrinsic images considering color information."* Ph.D. thesis, Ediciones Gráficas Rey, 2015.
9. Patricia Marquez. *"A Condence Framework for the Assessment of Optical Flow Performance."* Ph.D. thesis, Ediciones Gráficas Rey, 2015.
10. Sergio Vera. *"Anatomic Registration based on Medial Axis Parametrizations."* Ph.D. thesis, Ediciones Gráficas Rey, 2015.

2.4 Book Chapters (6)

1. C. Alejandro Parraga. "Perceptual Psychophysics." In *Biologically-Inspired Computer Vision: Fundamentals and Applications*, edited by G.Cristobal, M.Keil and L.Perrinet, 2015.
2. Debora Gil, F. Javier Sanchez, Gloria Fernandez-Esparrach, and Jorge Bernal. "3D Stable Spatio-temporal Polyp Localization in Colonoscopy Videos." In *Computer-Assisted and Robotic Endoscopy. Revised selected papers of Second International Workshop, CARE 2015, Held in Conjunction with MICCAI 2015*, 140–152. Vol. 9515. LNCS., 2015.
3. Fadi Dornaika, Bogdan Raducanu, and Alireza Bosaghzadeh. "Facial expression recognition based on multi observations with application to social robotics." In *Emotional and Facial Expressions: Recognition, Developmental Differences and Social Importance*, edited by Bruce Flores, 153–166. Nova Science publishers, 2015.
4. Hanne Kause, Aura Hernandez-Sabate, Patricia Marquez, Andrea Fuster, Luc Florack, Hans van Asses, and Debora Gil. "Confidence Measures for Assessing the HARP Algorithm in Tagged Magnetic Resonance Imaging." In *Statistical Atlases and Computational Models of the Heart. Revisedn selected papers of Imaging and Modelling Challenges 6th International Workshop, STACOM 2015, Held in Conjunction with MICCAI 2015*, 69–79. Vol. 9534. LNCS. Springer International Publishing, 2015.
5. Jorge Bernal, F. Javier Sanchez, Cristina Rodriguez, and Gloria Fernandez-Esparrach. "Bulding up the future of colonoscopy: A synergy between clinicians and computer scientists." In *Colonoscopy and Colorectal Cancer*, 2015.
6. Julie Digne, Mariella Dimiccoli, Neus Sabater, and Philippe Salembier. "Neighborhood Filters and the Recovery of 3D Information." In *Handbook of Mathematical Methods in Imaging*, 1645–1673. Springer New York, 2015.

2.5 Journals with Impact Factor (50)

1. Adriana Romero, Petia Radeva, and Carlo Gatta. "Meta-parameter free unsupervised sparse feature learning." *IEEE Transactions on Pattern Analysis and Machine Intelligence* 37, no. 8 (2015): 1716–1722.
2. Alvaro Cepero, Albert Clapes, and Sergio Escalera. "Automatic non-verbal communication skills analysis: a quantitative evaluation." *AI Communications* 28, no. 1 (2015): 87–101.
3. Andres Traumann, Gholamreza Anbarjafari, and Sergio Escalera. "Accurate 3D Measurement Using Optical Depth Information." *Electronic Letters* (2015).
4. Carles Sanchez, Jorge Bernal, F. Javier Sanchez, T.Rosell, M.Diez, and Debora Gil. "Towards On-line Quantification of Tracheal Stenosis from Videobronchoscopy." *International Journal of Computer Assisted Radiology and Surgery* 10, no. 6 (2015): 935–945.
5. Carolina Malagelada, Michal Drozdal, Santiago Segui, Sara Mendez, Jordi Vitria, Petia Radeva, Javier Santos, Anna Accarino, Juan R. Malagelada, and Fernando Azpiroz. "Classification of functional bowel disorders by objective physiological criteria based on endoluminal image analysis." *American Journal of Physiology-Gastrointestinal and Liver Physiology* 309, no. 6 (2015): G413–G419.
6. Christophe Rigaud, Clement Guerin, Dimosthenis Karatzas, Jean-Christophe Burie, and Jean-Marc Ogier. "Knowledge-driven understanding of images in comic books." *International Journal on Document Analysis and Recognition* 18, no. 3 (2015): 199–221.
7. Daniel Sanchez, Miguel Angel Bautista, and Sergio Escalera. "HuPBA 8k+: Dataset and ECOC-GraphCut based Segmentation of Human Limbs." *Neurocomputing* 150, no. A (2015): 173–188.
8. David Aldavert, Marçal Rusiñol, Ricardo Toledo, and Josep Lladós. "A Study of Bag-of-Visual-Words Representations for Handwritten Keyword Spotting." *International Journal on Document Analysis and Recognition* 18, no. 3 (2015): 223–234.
9. David Sanchez-Mendoza, David Masip, and Agata Lapedriza. "Emotion recognition from mid-level features." *Pattern Recognition Letters* 67, no. Part 1 (2015): 66–74.
10. Debora Gil, David Roche, Agnes Borrás, and Jesus Giraldo. "Terminating Evolutionary Algorithms at their Steady State." *Computational Optimization and Applications* 61, no. 2 (2015): 489–515.
11. Eloi Puertas, Sergio Escalera, and Oriol Pujol. "Generalized Multi-scale Stacked Sequential Learning for Multi-class Classification." *Pattern Analysis and Applications* 18, no. 2 (2015): 247–261.
12. Fahad Shahbaz Khan, Jiaolong Xu, Muhammad Anwer Rao, Joost van de Weijer, Andrew Bagdanov, and Antonio Lopez. "Recognizing Actions through Action-specific Person Detection." *IEEE Transactions on Image Processing* 24, no. 11 (2015): 4422–4432.
13. Fahad Shahbaz Khan, Muhammad Anwer Rao, Joost van de Weijer, Michael Felsberg, and J.Laaksonen. "Compact color–texture description for texture classification." *Pattern Recognition Letters* 51 (2015): 16–22.
14. Francisco Alvaro, Francisco Cruz, Joan-Andreu Sanchez, Oriol Ramos Terrades, and Jose Miguel Benedi. "Structure Detection and Segmentation of Documents Using 2D Stochastic Context-Free Grammars." *Neurocomputing* 150, no. A (2015): 147–154.
15. Frederic Sampedro, and Sergio Escalera. "Spatial codification of label predictions in Multi-scale Stacked Sequential Learning: A case study on multi-class medical volume segmentation." *IET Computer Vision* 9, no. 3 (2015): 439–446.
16. Frederic Sampedro, Anna Domenech, Sergio Escalera, and Ignasi Carrio. "Deriving global quantitative tumor response parameters from 18F-FDG PET-CT scans in patients with non-Hodgkin's lymphoma." *Nuclear Medicine Communications* 36, no. 4 (2015): 328–333.

17. Frederic Sampedro, Sergio Escalera, Anna Domenech, and Ignasi Carrio. "A computational framework for cancer response assessment based on oncological PET-CT scans." *Computers in Biology and Medicine* 55 (2015): 92–99.
18. Frederic Sampedro, Sergio Escalera, Anna Domenech, and Ignasi Carrio. "Automatic Tumor Volume Segmentation in Whole-Body PET/CT Scans: A Supervised Learning Approach Source." *Journal of Medical Imaging and Health Informatics* 5, no. 2 (2015): 192–201.
19. G. Lisanti, I. Masi, Andrew Bagdanov, and Alberto del Bimbo. "Person Re-identification by Iterative Re-weighted Sparse Ranking." *IEEE Transactions on Pattern Analysis and Machine Intelligence* 37, no. 8 (2015): 1629–1642.
20. G. Zahnd, Simone Balocco, A. Serusclat, P. Moulin, M. Orkisz, and D. Vray. "Progressive attenuation of the longitudinal kinetics in the common carotid artery: preliminary in vivo assessment Ultrasound in Medicine and Biology." *Ultrasound in Medicine and Biology* 41, no. 1 (2015): 339–345.
21. G. Blasco, Simone Balocco, J. Puig, J. Sanchez-Gonzalez, W. Ricart, J. Daunis-I-Estadella, X. Molina, S. Pedraza, and J. M. Fernandez-Real. "Carotid pulse wave velocity by magnetic resonance imaging is increased in middle-aged subjects with the metabolic syndrome." *International Journal of Cardiovascular Imaging* 31, no. 3 (2015): 603–612.
22. Ivan Huerta, Marco Pedersoli, Jordi Gonzalez, and Alberto Sanfeliu. "Combining where and what in change detection for unsupervised foreground learning in surveillance." *Pattern Recognition* 48, no. 3 (2015): 709–719.
23. Ivan Huerta, Michael Holte, Thomas B. Moeslund, and Jordi Gonzalez. "Chromatic shadow detection and tracking for moving foreground segmentation." *Image and Vision Computing* 41 (2015): 42–53.
24. Jaume Amores. "MILDE: multiple instance learning by discriminative embedding." *Knowledge and Information Systems* 42, no. 2 (2015): 381–407.
25. Joan M. Nuñez, Jorge Bernal, F. Javier Sanchez, and Fernando Vilariño. "GRowing Algorithm for Intersection Detection (GRAID) in branching patterns." *Machine Vision and Applications* 26, no. 2-3 (2015): 387–400.
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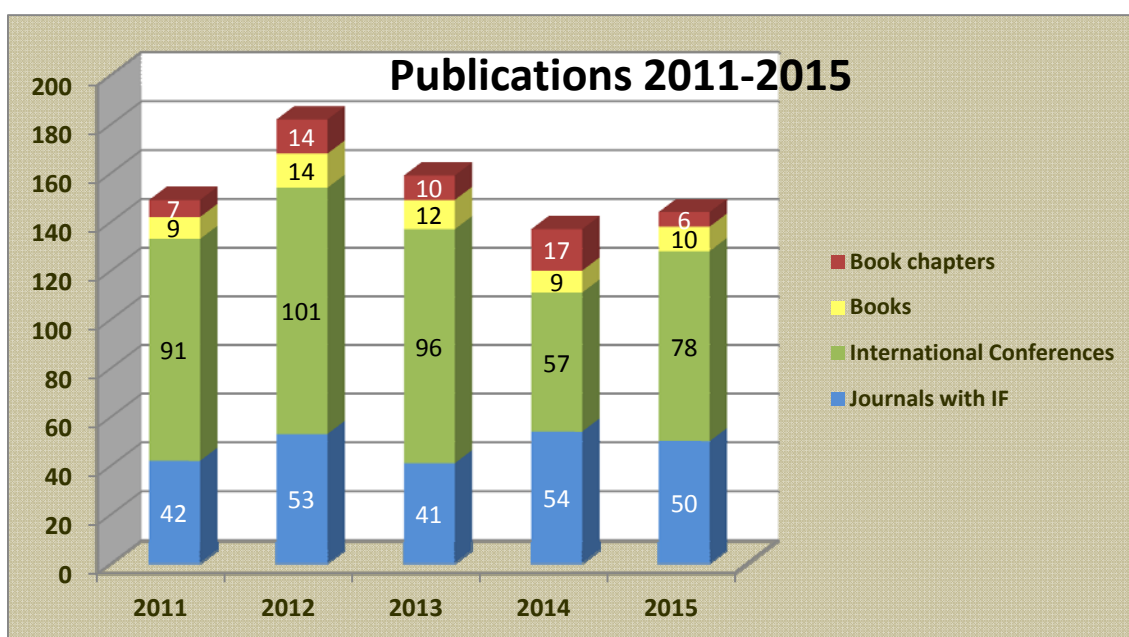
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6. Victor Campmany, Sergio Silva, Juan Carlos Moure, Antoni Espinosa, David Vazquez, and Antonio Lopez. "GPU-based pedestrian detection for autonomous driving." In Programming and Tunning Massive Parallel Systems. PUMPS, 2015.
7. Wenjuan Gong, Y.Huang, Jordi Gonzalez, and Liang Wang. "An Effective Solution to Double Counting Problem in Human Pose Estimation." In Arxiv, 2015.

11. Fact Sheet - Publications

Publications	Number
IF Journals	50
Journals	4
International Conferences	78
Book Chapters	6
Books	10
Miscellanea	7
Total	155

Journals with IF	
Q1	22
Q2	13
Q3	10
Q4	5



12. Organization of Conferences, Workshops and other research and dissemination activities

Automatic Polyp detection Challenge 2015, in International Symposium on Biomedical Imaging: From Nano to Macro

Co-chair: **Dr. Jorge Bernal, Dr. F. Javier Sánchez**

Place: Brooklyn, N. Y. (USA)

Dates: April 16-19, 2015

ChaLearn LAP Challenge and Workshop on Pose Recovery, Action Recognition and Cultural Event Recognition, in conjunction with CVPR 2015

Co-chairs: **Dr. Sergio Escalera, Dr. Xavier Baró & Dr. Jordi González**

Track chairs: **Dr. Sergio Escalera, Dr. Xavier Baró & Dr. Jordi González**

Place: Boston, MA (USA)

Date: June 12, 2015

6th International Workshop on Computer Vision in Vehicular Technology (CVVT), Assisted Driving, Exploration Rovers, Aerial and Underwater Vehicles, in conjunction with CVPR 2015

Co-chairs: **Dr. Antonio López, Dr. David Vázquez**

Place: Boston, MA (USA)

Date: June 12, 2015

IbPRIA 2015: 7th Iberian Conference on Pattern Recognition and Image Analysis

Tutorial chair: **Dr. Maria Vanrell**

Demo co-chair: **Dr. David Vázquez**

Session chairs: **Dr. Petia Radeva, Dr. Maria Vanrell, Dr. David Vázquez, Dr. Fernando Vilariño**

Place: Santiago de Compostela

Date: June 17-19, 2015

13th IAPR International Conference on Document Analysis and Recognition - ICDAR 2015

Publicity chair: **Dr. Josep Lladós**

Area 6 (Historical Documents & Digital Libraries) Co-chair: **Dr. Josep Lladós**

Place: Nancy (France)

Dates: August 23-26, 2015

ICDAR 2015- Robust Reading Competition, in 13th IAPR International Conference on Document Analysis and Recognition (ICDAR 2015)

Lead organiser: **Dr. Dimosthenis Karatzas**

Place: Nancy (France)

Dates: August 23-26, 2015

CBDAR 2015 – 6th Int. Workshop on Camera Based Document Analysis and Recognition, in conjunction with 13th IAPR International Conference on Document Analysis and Recognition (ICDAR 2015)

General chair: **Dr. Dimosthenis Karatzas**

Place: Nancy (France)

Date: August 23, 2015

12th of the IEEE International Conference on Advanced Video and Signal-Based Surveillance (AVSS 2015)

Workshop Co-chair: **Dr. Jordi González**

Place: Karlsruhe (Germany)

Date: August 25-28, 2015

18th International Conference on Image Analysis and Processing (ICIAP 2015)

Area (Video Analysis & Understanding) Co-chair: **Dr. Jordi González**

Place: Genova (Italy)

Date: September 7-11, 2015

Color in Texture and Material Recognition Workshop –CTMR 2015, in conjunction with ICIAP 2015

Co-chair: **Dr. Joost van de Weijer**

Place: Genova (Italy)

Date: September 7, 2015

Sub-Challenge Automatic polyp detection in colonoscopy videos, part of Endoscopic Vision Challenge, in conjunction with 18th International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI2015)

Co-chair: **Dr. Jorge Bernal, Dr. F. Javier Sánchez**

Place: Munich (Germany)

Date: October 9, 2015

Special Session on Autonomous Driving and Driver Assistance Systems, in the Second Iberian Robotics Conference (ROBOT 2015)

Co-organizer: **Dr. Angel Sappa**

Place: Lisbon (Portugal)

Date: November 19, 2015

International Conference on Computer Vision – ICCV 2015

Area chair: **Dr. Joost van de Weijer**

Place: Santiago de Chile

Dates: December 11-18, 2015

5th Color and Photometry in Computer Vision Workshop CPCV 2015, in conjunction with International Conference on Computer Vision – ICCV 2015

Co-organizer: **Dr. Joost van de Weijer**

Place: Santiago de Chile

Date: December 11, 2015

International Workshop on Transferring and Adapting Source Knowledge in Computer Vision (TASK-CV), in conjunction with International Conference on Computer Vision – ICCV 2015

Co-Chairs: **Dr. Antonio Lopez, Dr. David Vázquez**

Place: Santiago de Chile

Date: December 11, 2015

ChaLearn LAP Challenge and Workshop: Apparent Age Estimation and Cultural Event, in conjunction with International Conference on Computer Vision – ICCV 2015

Co-chairs: **Dr. Sergio Escalera, Dr. Xavier Baró, Dr. Jordi González**

Area chairs: **Dr. Sergio Escalera, Dr. Xavier Baró, Dr. Jordi González**

Place: Santiago de Chile

Date: December 12, 2015

13. Awards

Outstanding PhD Award from the Computer Science Department – UAB, period 2012-2013

Date: April 2015

- **Dr. Bhaskar Chakraborty**, for the thesis “Model Free Approach to Human Action Recognition”, supervised by **Dr. Ernest Valveny**
- **Dr. Albert Gordo**, for the thesis “Document Image Representation, Classification and Retrieval in Large-Scale Domains”, supervised by **Dr. Jordi González, Dr. Xavier Roca**
- **Dr. David Vázquez**, for the thesis “Domain Adaptation of Virtual and Real Worlds for Pedestrian Detection”, supervised by **Dr. Antonio López**

Best Thesis award - Spanish Association for Pattern Recognition and Image Analysis (AERFAI)

Dr. David Vázquez, for the thesis “Domain Adaptation of Virtual and Real Worlds for Pedestrian Detection”, supervised by **Dr. Antonio López**

Date: June 2015

Best PhD Dissertation Award 2015 – Spanish Chapter of Intelligent Transportation Systems Society ITTS

Dr. David Vázquez, for the thesis “Domain Adaptation of Virtual and Real Worlds for Pedestrian Detection”, supervised by **Dr. Antonio López**

Date: December 2015

Pioneer Award (Institució CERCA) for PhD theses with commercial or industrial interest

Dr. Michal Drozdal, for the thesis “Sequential image analysis for computer-aided wireless endoscopy”, supervised by **Dr. Petia Radeva**

Date: December 2015

Best Master Thesis project award – 3rd Prize, Spanish Chapter of Intelligent Transportation Systems Society ITTS

Gabriel Villalonga, for the MSc thesis “Online City Maps with Pedestrian Behaviours Statistics”, supervised by **Dr. Antonio López** and **Dr. David Vázquez**

Date: December 2015

Best Paper award at 4th MICCAI Workshop on Clinical Image-based Procedures: Translational Research in Medical Imaging (CLIP 2015)

Dr. Carles Sánchez Ramos, **Dr. Marta Díez-Ferrer**, **Dr. F. Javier Sánchez**, **Dr. Jorge Bernal**, **Dr. Antoni Rosell** & **Dr. Debora Gil**, for the paper “Navigation Path Retrieval from Videobronchoscopy using Bronchial Branches”

Date: October 5, 2015

Best Poster award – 2nd Prize, Programming and Tuning Massively Parallel System, at PUMPS Summer School, organized by Barcelona Supercomputing Center, University of Illinois at Urbana-Champaign, Universitat Politècnica de Catalunya, HiPEAC Network of Excellence

Víctor Campmany for the poster “GPU-based pedestrian detection for autonomous driving”

Date: July 6-10, 2015

Google Summer of Code - GSoC 2015

Lluís Gómez Bigordà, for the project “Improve and expand Scene text detection module in Open CV”

2nd award at the Automatic Polyp Detection Challenge 2015, in International Symposium on Biomedical Imaging: From Nano to Macro

Dr. Jorge Bernal, Dr. F. Javier Sánchez, Dr. Gloria Fernández-Esparrach, **Dr. Débora Gil**, Dr. Cristina Rodríguez and **Dr. Fernando Vilariño**, for the work “WM-DOVA maps for accurate polyp highlighting in colonoscopy: Validation vs. saliency maps from physicians”

Date: April 2015

Award Sub-challenge Automatic Polyp Detection in Colonoscopy Videos, part of Endoscopic Vision Challenge, in 18th International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI2015)

Winners in 2 categories

Dr. Jorge Bernal, Dr. F. Javier Sánchez

Date: October 2015

Prize to the best diffusion work on Artificial Intelligence 2015 (accesit) – ACIA The Catalan Association for Artificial Intelligence

Dr. Antonio López, Autonomous Driving