Felipe Calderero

Date of birth: October 2nd, 1981
Nationality: Spanish
E-mail: felipe.calderero@upf.edu

CURRENT POSITION

Visitant Professor at the Pompeu Fabra University.
Department of Information and Communication Technologies (DTIC).
Lecturer of *Signals and Systems, Probability, Calculus, Waves and Propagation, Image Processing, and Video Processing.*
(Bachelor Degree on Computer Engineering, Audiovisual Systems Engineering, Telematics Engineering, EESE).
Barcelona, Spain.
From September 2010 to present.

Researcher at Fundació Barcelona Media.
BM R+D Image Division.
In House Consulting in the context of *FP7 SCENE Project - Novel Scene representations for richer networked media*.
Topics of interest: Evaluation of depth sensors and development of efficient algorithms for acquisition and enhancement of depth map video sequences to improve 3D scene reconstruction.
Other topics: time-of-flight and stereo depth processing, optical flow estimation, efficient image and video processing algorithms in CUDA (GPU programming).
Barcelona, Spain.
From October 2012 to present.

PAST POSITIONS

Postdoctoral Position as Scientific Researcher at Siemens AG (Germany).
Healthcare Sector – Ultrasound Division.
Marie Curie Industry-Academia Partnerships Grant from the European Commission.
Topics of interest: Analysis and segmentation of 2D and 3D ultrasound images applied to detection of neurological damage in fetus and neonates.
Erlangen, Germany.
From September 2009 to August 2010.
Researcher at the Fetal and Perinatal Medicine Research Group (FPMR).
Topics of interest: Segmentation of magnetic resonance images (MRI) and statistical analysis of brain connectivity networks (brain connectome).
IDIBAPS. Clínic, University Hospital (Hospital Clínic de Barcelona).
Barcelona, Spain.
From September 2009 to August 2010.

Assistant Professor at the Pompeu Fabra University (part-time).
Department of Information and Communication Technologies (DTIC).
Lecturer of *Signal Processing III (Video Coding).*
(Degree in Computer Engineering).
Barcelona, Spain.
From May 2010 to August 2010.

Image Processing Group Research Assistant,
Computers in the Human Interaction Loop (CHIL).
Project developed under the Sixth Framework Program of the European Union.
Associate Professor Josep R. Casas.
Technical University of Catalonia (UPC).
From December 2004 to September 2005.

Image Processing Group Research Assistant.
3D Posture Estimation Using Geodesic Distance Maps.
Professor Ferran Marqués.
Technical University of Catalonia (UPC).
From September 2003 to December 2003.

Epsilon Formación S.L.
Private academy teacher in *'Sistemas y Señales 2'* (Digital Signals and Systems), subject included in the 2nd year of the Telecommunications Engineering degree of the Technical University of Catalonia. From October 2002 to January 2003.

EDUCATION

Electrical Engineering

Philosophy Doctor (PhD.) in Electrical Engineering (Image Processing).
PhD. Thesis (Excellent Cum Laude): *Information Theoretical Region Merging Approaches and Fusion of Hierarchical Segmentation Results.*
Department of Signal Theory and Communications.
Technical University of Catalonia (UPC).
Topics of interest: Image Segmentation, Data Fusion, and Information Theory.
Advisor: Prof. Ferran Marqués.
March, 2005 – February 2010.

Master of Science (MSc.) in Research on Information and Communication Technologies.
MERIT – Joint European Master on Research in Information and Communication Technologies.
Final mark: 9.68 over 10.
Technical University of Catalonia (UPC).
November, 2004 – October, 2007.

Master Degree (MEng.) in Electrical (Telecommunications) Engineering.
Technical University of Catalonia (UPC).
Advanced courses in Image Processing, Image Transmission and Storage, Array Processing, Remote Sensing and Cryptography.
September, 1999 – November, 2004.

Diploma Thesis: *Level Sets Applied to Inverse Problem in Electrocardiography.*
Highest mark with distinction.
Northeastern University, Boston, Massachusetts, USA.
February, 2004 – September, 2004.

Business and Administration

Postgraduate Diploma in Management of the Business Aspects in Science and Technology.
Talència Grant (Fundació Institució Catalana de Suport a la Recerca, a public regional institution promoting research in Catalonia).
idEC – Pompeu Fabra University.
March, 2011 – December, 2011.

Mathematics

Bachelor Degree in Mathematics.
Universidad Nacional de Estudios a Distancia (UNED).
September, 2011 – June, 2015 (expected).

LONG TERM VISITS

Feb.2004 – Oct.2004   Biomedical Signal Processing Lab
                       Northeastern University, Boston, USA

Nov.2009 – Jun.2010   Fetal and Perinatal Medicine Research Group,
                       Hospital Clínic, Barcelona, Spain

SHORT TERM VISITS

Jul.2005 – Aug.2005   eNTERFACE Summer Workshop 2005
                       Faculté Polytechnique de Mons, Mons, Belgium

PUBLICATIONS

Journal papers

Recovering relative depth from low-level features without explicit T-junction detection and interpretation.
Felipe Calderero, Vicent Caselles.
Accepted to International Journal of Computer Vision (IJCV), January, 2013.

Relative depth from blur: depth order estimation from a single image of an uncalibrated camera using the blur cue.
Pol Moreno, Felipe Calderero.
Submitted to Signal, Image and Video Processing Journal (Springer). September, 2012.

Multispectral Cooperative Segmentation Fusion: A Tool for Joint Extraction and Hierarchical Segmentation in High Spatial Resolution Images.
Felipe Calderero, Francisco Eugenio, Javier Marcello,Ferran Marqués.
IEEE Geoscience and Remote Sensing Letters, vol. 9 , no. 6, pp. 1012-1016, November, 2012.

Multiview depth coding based on combined color/depth segmentation.
J. Ruiz-Hidalgo, J.R. Morros, P. Aflaki, F. Calderero, F. Marqués.
Journal of Visual Communication and Image Representation, vol. 23, no. 1, pp. 42-52. January, 2012.

Region Merging Techniques Using Information Theory Statistical Measures.
Felipe Calderero, Ferran Marqués.
IEEE Transactions on Image Processing Journal, vol. 19, no. 6, pp. 1567-1586. June, 2010.

Book chapters

Image Analysis and Understanding based on Information Theoretical Region Merging Approaches for Segmentation and Cooperative Fusion.
Felipe Calderero.
Handbook of Research on Computational Intelligence for Engineering, Science and Business.
Editors: P. Dutta, S. Bhattacharyya. Publisher: ICI Global.
In press, 2012.

Conference papers

1. **Evaluation of sharpness measures and proposal of a stop criterion for reverse diffusion in the context of image deblurring**.

Pol Moreno, Felipe Calderero.
Accepted to VISAPP 2013 (International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications). September, 2012.

2. **Region Merging Parameter Dependency as Information Diversity to create Sparse Hierarchies of Partitions.**
Felipe Calderero, Ferran Marqués.
Proceedings ICIP 2010 (International Conference on Image Processing).
September 26-29th, 2010. Hong Kong.

3. **Comparison of Statistical Methods for Studying Brain Regional Connections in Weighted Brain Networks.**
Dafnis Batalle, Felipe Calderero, Eduard Gratacos, Ivan Amat-Roldan.
Proceedings of the HBM 2010 (Human Brain Mapping Conference).
June 6-10th, 2010. Barcelona, Spain.

4. **Performance Evaluation of Probability Density Estimators for Unsupervised Information Theoretical Region Merging .**
Felipe Calderero, Ferran Marqués, Antonio Ortega.
Proceedings ICIP 2009 (International Conference on Image Processing).
November 7-10 th, 2009. Cairo, Egypt.

5. **Hierarchical Segmentation of Vegetation Areas in High Spatial Resolution Images by Fusion of Multispectral Information.**
Felipe Calderero, Ferran Marqués, Francisco Eugenio, Javier Marcello.
Proceedings IGARRS 2009 (International Symposium on Geoscience and Remote Sensing).
July 13-17 th, 2009. Cape Town, South Africa.

6. **Hierarchical Fusion of Color and Depth Information at Partition Level by Cooperative Region Merging.**
Felipe Calderero, Ferran Marqués.
Proceedings ICASSP 2009 (International Conference on Acoustics, Speech, and Signal Processing).
April 19-24 th, 2009. Taipei, Taiwan.

7. **General Region Merging Approaches Based on Information Theory Statistical Measures.**
Felipe Calderero, Ferran Marqués.
Proceedings ICIP 2008 (International Conference on Image Processing).
October 12-15 th, 2008. San Diego, USA.

8. **General Region Merging Based on First Order Markov Information Theory Statistical Measures.**

Felipe Calderero, Ferran Marqués.
Proceedings EUSIPCO 2008 (16th European Signal Processing Conference).
August 25-29th, 2008. Laussane, Switzerland.

9. **Object-Based Evaluation of Hierarchical Region-Based Representations Based on Information Theory Statistical Measures.**
Felipe Calderero, Ferran Marqués.
Best Student Paper Award.
Proceedings CBMI 2008 (International Sixth International Workshop on Content-Based Multimedia Indexing).
June 18-20th, 2008. London, UK.

10. **Multiple View Region Matching as a Lagrangian Optimization Problem.**
Felipe Calderero, Ferran Marqués, Antonio Ortega.
Proceedings ICASSP 2007 (International Conference on Acoustics, Speech, and Signal Processing).
April 15-20th, 2007. Honolulu, Hawaii, USA.

11. Contribution to the deliverable report: ***Report on Multimodal Analysis and Synthesis (M24),*** for the SIMILAR Network of Excellence FP6-507609.
Ref: NoE FP6-507609\WP9\D23-M24\R, 82 pages, December 2005.

12. **GMM-Based Multimodal Biometric Verification.**
Yannis Stylianou, Yannis Pantazis, Felipe Calderero, Pedro Larroy, François Severin,
Sascha Schimke, Rolando Bonal, Federico Matta, and Athanasios Valsamakis.
Final Report for the Proceedings of ENTERFACE'05 (Similar NoE Workshop on Multimodal Interfaces).
July 18th – August 12th, 2005. Mons, Belgium.

13. **A Method to Reconstruct Activation Wav efronts Without Isotropy Assumptions Using a Level Sets Approach.**
Felipe Calderero, Alireza Ghodrati, Dana H. Brooks, Gilead Tadmor, and Rob MacLeod.
Proceedings of FIMH 2005 (Functional Imaging and Modeling of the Heart 2005).
June 2-4, 2005. Barcelona, Spain.
Published in the series:
Lecture Notes in Computer Science, Vol. 3504
Functional Imaging and Modeling of the Heart
Proc. Third International Workshop, FIMH 2005, Barcelona, Spain, June 2-4, 2005,
Frangi, A.F.; Radeva, P.I.; Santos, A.; Hernandez, M. (Eds.) 2005, XV, 489 p., Softcover
ISBN: 3-540-26161-3
Publisher: Springer -Verlag GmbH
ISSN: 0302-9743

14. **A Level Set Algorithm for the Inverse Problem of Electrocardiography**.
    Alireza Ghodrati, Felipe Calderero, Dana H. Brooks, Gilead Tadmor, Rob MacLeod.
    Proceedings of 38th Asilomar Conference on Signals, Systems and Computers.
    November 7-10, 2004. Monterrey, California, USA.

PATENTS

European Patent Request:
Application number: EP12382512.7
Title: *Method for recovering a relative depth map from a single image or a sequence of still images*
Date of receipt: 18 December 2012
Applicant: UNIVERSITAT POMPEU FABRA
Country: ES

PARTICIPATION IN RESEARCH PROJECTS

Projects funded by **Spanish Government** or other **public institutions**:

Tecnologías para la creación y gestión automática de contenidos audiovisuales inteligentes, I3MEDIA.
Funded by: CENIT-2007-1012
Partners: CCMA, Mediapro, UPC
From March 2008 to December 2010.
Principal investigator: Ferran Marques Acosta
Number of researchers: 12

Procesado de Vídeo en Entornos Controlados: Aplicación a Seguridad, Salas Inteligentes y Telepresencia (PROVEC)
Funded by: TEC2007-66858/TCM Ministerio de Educación y Ciencia (449.455€)
From October 2007 to September 2010.
Principal investigator: Josep R. Casas Pla
Number of researchers: 18

Análisis, codificación e indexación semánticos en entornos controlados. Aplicación a salas inteligentes (ACERCA)
Funded by: TEC2004-01914 Ministerio de Educación y Ciencia (231.760€)
From December 2004 to December 2007.
Principal investigator: Montse Pardàs Feliu
Number of researchers: 17

Projects funded by **European public institutions**:

Computers in the Human Interaction Loop (CHIL)
Funded by: UE-IST, Integrated Project (IP) IST-2003-506909 (2.474.036€)
Partners: 17 European and US partners, lead by Fraunhofer IITB and UKA-ISL
From January 2004 to December 2007.
Principal investigator: Josep R. Casas Pla
Number of researchers: 24

European research taskforce creating human-machine interfaces SIMILAR to human-human communication (SIMILAR)
Funded by: UE-IST, Red de Excelencia (NoE). FP6-507609 (96.810€)
Partners: 32 European partners leaded by UCL.
From December 2003 to December 2006.
Principal investigator: Ferran Marqués Acosta
Number of researchers: 14

HONOURS & AWARDS

Talència Grant awarded by **Fundació Institució Catalana de Suport a la Recerca**, a public regional institution promoting research in Catalonia). The grant provided financial assistance to attend the *Postgraduate Diploma in Management of the Business Aspects in Science and Technology* (idEC – Pompeu Fabra University). Barcelona, March, 2011.

IEEE / IET Electronic Library (IEL) Award.
On its 125th Anniversary, the IEEE (Institute of Electrical and Electronics Engineers, Inc.) has awarded PhD. students **with an outstanding record** around the world.
Particularly, 12 students have been awarded in Europe, two of them in Spain.
The prize was awarded by Jonathan Dahl, IEEE staff director, and Federico Peña, IEEE delegate for Spain, in **Barcelona on May 26, 2010**.

CBMI 2008 Best Student Paper Award.
International Sixth International Workshop on Content-Based Multimedia Indexing.
June 18-20th, 2008. London, UK.

Secondary Education Extraordinary Award, 1998.
1st mark of Barcelona and 3rd of Catalonia.

LANGUAGES

English:
  Certificate Advanced in English (Dec. 2002) and First Certificate in English (June 1999).
  University of Cambridge.
  Writing, speaking and reading: High level

Italian:
  Writing, reading and speaking: High level

German:
  B2 level certificate (EOI – Spanish Official Language School)
  Writing, reading and speaking: Middle-low level

French:
  Writing, reading and speaking: Middle-low level

Spanish and Catalan:
  Mother tongues (bilingual)

PROFESSIONAL ACTIVITIES

1. *Reviewer*:
   - *JOURNALS:*
     - IEEE TRANSACTIONS on IMAGE PROCESSING.
     - IEEE TRANSACTIONS on CIRCUITS AND SYSTEMS for VIDEO *Technology*.
     - EURASIP JOURNAL ON IMAGE and Video Processing.
     - REMOTE SENSING OF ENVIRONMENT – ELSEVIER.
     - SIGNAL, IMAGE AND VIDEO PROCESSING – SPRINGER
     - INTERNATIONAL JOURNAL OF COMPUTER VISION – SPRINGER
   - Conferences: *WIAMIS'09, EUSIPCO'08, EUSIPCO'09, EUSIPCO'10, EUSIPCO'11, ICIP'12*

2. *IEEE* and *EURASIP member.*

3. *Barcelona IEEE Student Branch Chairman*.
   From September 2002 to September 2003.

4. *Barcelona IEEE Student Branch Member.*
   From March 2002.

5. *IEEE-Buran Technical Magazine Editor Assistant.*
   April 2002, No. 18 and April 2003, No.19.

6. *Barcelona BEST Member (Board of European Students of Technology).*
   From July 2002 to September 2004.

FURTHER EDUCATION

1. *Santalo's Summer School in Mathematical Models in Image Proc. and Computer Vision.*
   Universidad Internacional Menezdez Pelayo (UIMP).
   Santader, Spain. August 8-12, 2011.

2. *eNTERFACE Summer Workshop 2005:*
   SIMILAR Network of Excellence Summer Workshop on Multimodal Interfaces.
   Faculté Polytechnique de Mons.
   Mons, Belgium. July 18 - August 12, 2005

3. *European Week 2005: "MAD Technology, WHAT Jeopardy ?"*
   Supélec – École Supérieure d'Electricité.
   BEST Winter Course.
   Paris, France. March 2005.

4. *Earthquakes and Their Consequences.*
University of Ljubljana.
BEST Summer Course.
Ljubljana, Slovenia. July, 2003.

5. *Telematics and Automation Systems for Athens 2004 Olympic Games.*
Technical University of Crete.
BEST Summer Course.
Chania, Greece. July, 2002.

6. *JAVA Programming Course.*
Barcelona Jove Telecom (UPC). February, 2002.

7. *VISUAL C++ Programming Course.*
Barcelona Jove Telecom (UPC). July, 2001.

8. *HTML and WebPages Programming Course (Dreamweaver, Homesite...).*
Barcelona IEEE Student Branch (UPC). March, 2001.

9. *Microcontrollers Programming and Layout Design Course.*
IAESTE-Telecommunications (UPC). February, 2001.

TEACHING

Processament de Vídeo (21620)
Titulació/estudi: Grau en Enginyeria de Sistemes Audiovisuals.
Curs: tercer (obligatòria).
Trimestre: primer.
Nombre de crèdits ECTS: 4.
Dedicació docent: 66 hores (coordinador).

Processament d'Imatge (21612)
Titulació/estudi: Grau en Enginyeria de Sistemes Audiovisuals.
Curs: tercer (obligatòria).
Trimestre: primer.
Nombre de crèdits ECTS: 4.
Dedicació docent: 16 hores.

Senyals i Sistemes (21409).
Titulació/estudi: Grau en Enginyeria en Informàtica, Grau en Enginyeria de Telemàtica i Grau en Enginyeria de Sistemes Audiovisuals.
Curs: segon (obligatòria).
Trimestre: primer i segon.
Nombre de crèdits ECTS: 8.
Dedicació docent: 48 hores.

Processament de Vídeo (21620)
Titulació/estudi: Grau en Enginyeria de Sistemes Audiovisuals.
Curs: tercer (obligatòria).
Trimestre: primer.
Nombre de crèdits ECTS: 4.
Dedicació docent: 66 hores (coordinador).
Avaluació de la docència impartida pel professor (P6 i P7 a l'informe d'avaluació docent, veure detall a l'annex): 9.68 i 9.58. Avaluació de l'assignatura en conjunt (P3): 9.05.

Processament d'Imatge (21612)

Titulació/estudi: Grau en Enginyeria de Sistemes Audiovisuals.

Curs: tercer (obligatòria).

Trimestre: primer.

Nombre de crèdits ECTS: 4.

Dedicació docent: 16 hores.

Avaluació de la docència impartida pel professor (P6 i P7 a l'informe d'avaluació docent, veure detall a l'annex): 9.79 i 9.84.

Senyals i Sistemes (21409).

Titulació/estudi: Grau en Enginyeria en Informàtica, Grau en Enginyeria de Telemàtica i Grau en Enginyeria de Sistemes Audiovisuals.

Curs: segon (obligatòria).

Trimestre: primer i segon.

Nombre de crèdits ECTS: 8.

Dedicació docent: 36 hores.

Avaluació de la docència impartida pel professor (P6 i P7 a l'informe d'avaluació docent, veure detall a l'annex): 9.24 i 9.27.

Càlcul i Mètodes Númerics (21592).

Titulació / Estudis: Grau en Enginyeria en Informàtica, Grau en Enginyeria Telemàtica , Grau en Enginyeria en Sistemes Audiovisuals.

Universitat Pompeu Fabra.

Curs: 1er curs (obligatòria).

Període: 1r i 2n trimestre.

Nombre de crèdits: 8 crèdits ECTS .

Dedicació docent**:** 16 hores.

Avaluació de la docència impartida pel professor (P6 i P7 a l'informe d'avaluació docent, veure detall a l'annex): 8.32 i 8.26.

CURS 2010 – 2011

Seminario Académico. Curso del Maestría (2 horas)

Hierarchical Image Segmentation based on Information Theoretical Region Merging.

Centro de Investigación y Desarrollo de Tecnología Digital.

Instituto Politénico Nacional.

Tijuana, México.

October, 8th, 2010.

Ones i Electromagnetisme (21405).

Titulació / Estudis: Grau en Enginyeria en Informàtica, Grau en Enginyeria Telemàtica , Grau en Enginyeria en Sistemes Audiovisuals.

Universitat Pompeu Fabra.

Curs: 1er curs (obligatòria).

Període: 2on i 3er trimestre.

Nombre de crèdits: 8 crèdits ECTS .

Dedicació docent**:** 40 hores.

Avaluació de la docència impartida pel professor (P6 i P7 a l'informe d'avaluació docent, veure detall a l'annex): 7.7 i 7.4

Probabilitat i Processos Estocàstics (21408).

Titulació/estudi: Grau en Enginyeria en Informàtica, Grau en Enginyeria en Sistemes Audiovisuals i Grau en Enginyeria Telemàtica.

Universitat Pompeu Fabra.

Curs: segon (obligatòria).

Trimestre: primer i segon.

Nombre de crèdits ECTS: 8.

Dedicació docent: 14 hores.

Avaluació de la docència impartida pel professor (P6 i P7 a l'informe d'avaluació docent, veure detall a l'annex): 9.88 i 10.

Senyals i Sistemes (21409).

Titulació/estudi: Grau en Enginyeria en Informàtica, Grau en Enginyeria de Telemàtica i Grau en Enginyeria de Sistemes Audiovisuals.

Curs: segon (obligatòria).

Trimestre: primer i segon.

Nombre de crèdits ECTS: 8.

Dedicació docent: 36 hores.

Avaluació de la docència impartida pel professor (P6 i P7 a l'informe d'avaluació docent, veure detall a l'annex): 9.5 i 9.56.

Xerrades sobre Temes Actuals en Tecnologies de la Informació i les Telecomunicacions (82862).

Lliure elecció col·lectius específics: Enginyeria en Informàtica i Enginyeria de Telecomunicació.

Universitat Pompeu Fabra.

Dedicació docent: 10 hores.

Avaluació de la docència impartida pel professor (P6 i P7 a l'informe d'avaluació docent, veure detall a l'annex): 8.93 i 8.86.

CURS 2009 – 2010

15

Referència oficial: *PROCESSAMENT DEL SENYAL III*
Titulació / Estudis: Enginyeria en Informàtica.
Universitat Pompeu Fabra.
Curs: 4rt curs (optativa).
Període: 3er trimestre (Maig 2010 – Juliol 2010).
Nombre de crèdits: 5.5 crèdits ECTS.
Dedicació docent: 26 hores.

CURS 2007 – 2008

Referència oficial: 26471 - TSMSM - TRANSMISSIÓ DE SENYALS MULTIMEDIA PER SISTEMES MÒBILS.
Assignatura optativa de tercer curs (6 crèdits ECTS).
Enginyeria Tècnica de Telecomunicacions, especialitat de So i Imatge.
Universitat Politècnica de Catalunya.
1r quadrimestre (Setembre 2007 – Febrer 2008).
Dedicació docent: 3 crèdits ECTS.

Referència oficial: *26398 - PDI - PROCESSAT DIGITAL D'IMATGE.*
Assignatura obligatòria de tercer curs (6 crèdits ECTS).
Enginyeria Tècnica de Telecomunicacions, especialitat de So i Imatge.
Universitat Politècnica de Catalunya.
2n quadrimestre (Febrer 2008 – Juliol 2008).
Dedicació docent: 0,75 crèdits ECTS.

THESIS DIRECTED

Relative Depth from Blur
Student: Pol Moreno
MSc. Thesis in Computer Engineering (Pompeu Fabra University)
Defense: July 2012

Diseño e implementación de una aplicación móvil para la detección e identificación de patrones de color perceptual orientada a personas con problemas de visión
(Design and implementation of a mobile application for the detection and identification of perceptual color patterns oriented to people with vision problems)

Student: Albert Vicente
MSc. Thesis in Computer Engineering (Pompeu Fabra University)
Defense: July 2012

Evaluación de algoritmos de segmentación de imágenes basados en fusión cooperativa de regiones
Evaluation of image segmentation algorithms based on cooperative region merging
Student: David Pérez
MSc. Thesis in Computer Engineering (Pompeu Fabra University)
Defense: September 2012

Extracción de contornos subjetivos o ilusorios en imágenes
Extraction of subjective or illusory contours in images
Student: Alexandra Pulido
MSc. Thesis in Computer Engineering (Pompeu Fabra University)
Defense: September 2012

PARTICIPATION IN THESIS DEFENSES

Implementación de la funcionalidad de vídeo para una aplicación móvil en producción.
Francisco Cortés. Advisor: Vicent Caselles.
MSc. Thesis in Computer Engineering (Pompeu Fabra University)
Defense: September 2012

Selección automática de imágenes. Photo-Storytelling.
Iván Alcoceba. Advisor: Vicent Caselles.
MSc. Thesis in Computer Engineering (Pompeu Fabra University)
Defense: September 2012

Aplicació de metamorfosi d'ombres per experiments de màgia: Siluetomorfosi
Jordi Cantó Lozano. Advisor: Narcís Parés.
MSc. Thesis in Computer Engineering (Pompeu Fabra University).
Defense: July 2011.

Implementació d'un sistema de control parental per continguts internet basat en el telèfon mòbil
Juan Luís López Muñoz. Advisor: Daniel Soto.
MSc. Thesis in Computer Engineering (Pompeu Fabra University).
Defense: July 2011.

CONTINUOUS EDUCATION IN TEACHING

Courses organized by the Center for Quality and Innovation in Teaching (Centre per a la Qualitat i la Innovació Docent, CQUID). Universitat Pompeu Fabra.

Curs 2011-2012

- *Tècnica de veu per al personal docent* (12 hores).
- *Coaching per a la docència: de l'erudició a l'acompanyament* (9 hores).
- *Lideratge docent a través de la intel·ligència emocional* (12 hores).
- *III Taller: Motivats per motivar* (2 hores).

Curs 2012-2013

- *L'Acció Tutorial a la UPF: Primer Curs – Escola Superior Politècnica* (2 hores).
- *Adaptació dels plans docents d'assignatures al nou marc d'avaluació* (1.5 hores).

REFERENCES

1. **Prof. Dana Brooks.**
   Full professor. Department of Electrical and Computer Engineering.
   Northeastern University. Boston (MA), USA.

   Contact information: Office: 405 Dana
                                 Phone: (617) 373-3352
                                 Fax: (617) 373-4189
                                 Email: brooks@ece.neu.edu

                                 Department of Electrical and Computer Engineering
                                 409 Dana Research Center
                                 Northeastern University
                                 360 Huntington Avenue
                                 Boston, MA 02115

2. **Prof. Antonio Ortega.**
   Professor. Signal and Image Processing Institute. Department of Electrical Engineering.
   University of Southern California. Los Angeles (CA), USA.

   Contact information: Tel: (213) 740-2320
                                 Fax: (213) 740-4651
                                 Email: antonio.ortega@sipi.usc.edu

                                 Signal and Image Processing Institute
                                 Department of Electrical Engineering
                                 University of Southern California
                                 3740 McClintock Ave., EEB 436
                                 Los Angeles, CA 90089-2564

3. **Prof. Ferran Marqués Acosta.**
   Full professor. Department of Signal Theory and Communications.
   Technical University of Catalonia (UPC). Barcelona, Spain.

   Contact information: Tel: +34 93 401 64 50
                                    Fax: +34 93 401 64 47

                           Email: ferran.marques@upc.edu

                              Office: D5-111.
                              Campus Nord, D5.
                              Universitat Politècnica de Catalunya (UPC) .
                              C/ Jordi Girona, 1-3
                              08034 Barcelona, Spain