

# Mohamed Daoudi

---

IMT Lille Douai, 20 Rue Guglielmo Marconi, 59650  
Villeneuve-d'Ascq, France

Friday 1<sup>st</sup> January, 2021  
ORCID: 0000-0003-4219-7860

email:  
mohamed.daoudi@imt-lille-douai.fr  
Research group: cristal.univ-lille.fr  
Website: cristal.univ-lille.fr/ daoudi

## RESEARCH INTERESTS

Computer Vision, Pattern Recognition, Statistical Shape Analysis, Deep Learning, Action recognition, Affective Computing, Emotion Recognition.

## PROFESSIONAL EXPERIENCE

2007 – Professor of Computer Science, IMT Lille Douai [**French Engineering Schools, Grande Ecole d'Ingénieurs**], Research Center in Computer Science, Signal and Automatic Control of Lille (CRISTAL UMR CNRS), France.

2015 – Image Groupe Leader, Research Center in Computer Science, Signal and Automatic Control of Lille (CRISTAL UMR CNRS)

2017–2018 Scientific advisory board, 3D Industries company London.

2014–2015 Scientific advisory board, 3D Industries company London.

2009–2016 Chair, Department of Computer Science and Networks, Telecom Lille

1998–2007 Associate Professor, Institut Mines-Télécom, Telecom Lille, France.

1994–1998 Assistant Professor, Institut Mines-Télécom, France.

*Visiting Professor:* School of Computer Science and Engineering, Beihang University, China (2014, April), Visiting Professor, University of Florence, Italy, (2001, 2016, July), University of Barcelona, Computer Vision Center UAB (2019, July).

## EDUCATION

2000 **Habilitation À Diriger des Recherches (HDR)**, University of Littoral (U.L.C.O), France, 2000. HDR is the highest academic degree in France and it is required for PhD supervision.

1993 **PhD in Electrical and Computer Engineering**, University of Lille, France.

1999 **MS in Electrical and Computer Engineering**, University of Lille, France.

1998 **BA in Computer Science**, University of Lille, France.

## COMMITTEE AND ADMINISTRATIVE SERVICE

- Image Groupe Leader at Research Center in Computer Science, Signal and Automatic Control of Lille (CRISAL UMR CNRS)(2015-).
- Expert for High Council for Evaluation of Research and Higher Education (Hcéres) (2019, 2020).
- Member of Advisor Laboratory Committee Research Center in Computer Science, Signal and Automatic Control of Lille (CRISAL UMR CNRS)(2015-). CRISAL is a CNRS joint laboratory, 400 people.
- Head of the Computer Science Department at IMT Lille Douai (Novembre 2009–2016).
- Member of Advisor Committee of Recherche and innovations of Institut Mines-Télécom, (2012-2016).
- Member of Advisor Laboratory Committee (LIFL UMR 8022), France (2006–2014).
- Promotions Committee (Assistant Professor) of University of Lille, France (2020).
- Promotions Committee (Professor) of Télécom Paris (2015, 2017) (France).
- Promotions Committee (Professor) of University of Technology of Troyes, France (2018).
- Promotions Committee (Associate Professor) of University of Picardie Jules Verne (UPJV) - Amiens, France (2011).
- Referee for CNRS Research Director Promotion, National Center for Scientific Research (CNRS), 2020.
- Referee for Professor Promotion IIIT-Delhi, India (2019).
- Referee for Professor Promotion, Politecnico di Torino, Italy, 2018.
- Referee for Associate Professor Promotion, Trinity college, Dublin, 2015.
- Referee for Professor Promotion, University of Calgary, 2012.
- Referee for Professor Promotion, New York University, 2012.
- Referee for Professor Promotion, Université du Québec Montréal, 2011.

## AWARDS AND DISTINCTIONS

- Elected Fellow of the International Association for Pattern Recognition in 2014 (For contributions to 3D shape analysis and retrieval and related applications).
- Promoted "Chevalier dans l'ordre des Palmes Académiques", (Award from Minister of Education and Research).

## RECOGNITIONS OF MY STUDENTS FOR JOINT RESEARCH

- Baiqiang Xia: Best paper award, Can 3D Shape of the Face Reveal your Age ? International Conference on Computer Vision Theory and Applications (VISAPP, VISIGRAPP) held in Lisbon - Portugal, 5-8, January, 2014.
- Chafik Samir: Best student paper award at CORESA, France (2006).
- Julien Tierny: Fulbright research fellowship, Lavoisier research fellowship (2008).

## RESEARCH FUNDING SUPPORT

- Initiatives for Science, Innovation, Territories and Economy (called I-SITEs), University of Lille, 132,161 €, 2019-2021.
- HUMAN 4D, French National Research Agency (ANR), 151,485 €, 2019-2023.
- University and Media Technology for Cultural Heritage (UMETECH), European Project EURASMUS+, 55k€, 2016-2018.
- Mesure, Analyse et Gestion de flux, Nativement Unifiée dans des Magasins (MAGNUM), FUI Fond Unique Interministériel (FUI), French Government and the Regions Clusters, 2014-2016, 91 k€.
- 3D Facial Analysis and Recognition For Ambient Intelligence State Region Hauts-de-France Plan, 2011-2013, 100 k€.
- 3D Face Analyzer, French National Research Agency (ANR) and National Natural Science Foundation of China, 2011-2013, 100 k€.
- Facial Analysis and Recognition Using 3D (FAR3D), French National Research Agency (ANR) Sécurité et Sureté Informatique, 2008-2011, 139 k€
- DELOS, Network of Excellence Delos <http://www.delos.info>, European Grant, 2006-2007.
- **P**ublic **O**pen **E**nvironment **S**ource **F**or a **S**afer **I**nternet **A**ccess (POESIA), European project European Grant, 2002-2004, 1,892 k€.
- SEMANTIC-3D Watermarking, Compression and Retrieval of 3D Objects, RNRT, 2002-2006, 119 k€.
- Bonus qualité recherche (BQR), 3D Scanner, University of Lille, 2007, 40 k€.
- RecoVis3D, 3D face recognition, Institut Mines-Télécom, 2007-2008.
- Modèles probabilistes indexés par des arbres aléatoires pour l'imagerie, National Center for Scientific Research (CNRS), 2004-2005.
- Action Jeune Equipe Indexation et Interaction Tridimensionnelles, National Center for Scientific Research (CNRS), 2000-2001.
- Robust multimedia retrieval methods: applications to the arts, University of Florence (Italy), French Ministry of Foreign Affairs, 2001.
- Nouveaux Services Multimédia pour les Applications Touristiques, Action intégrée, Maroc, French Ministry of Foreign Affairs, 2001-2005.
- Communication, Réseau et Multimédia, Action intégrée, Maroc, 1996-2000, French Ministry of Foreign Affairs, 1996-2000.
- Robust Image Retrieval By Sketch, Industrial Contract, Orange R&D, 1997-1998, 19 k€.

## CURRENT STUDENTS (5)

1. Oussema Bouafif (4<sup>th</sup> year student)
2. Benjamin Szczapa (3<sup>rd</sup> year student)
3. Baptiste Chopin (2<sup>nd</sup> year student)
4. Emery Pierson (2<sup>nd</sup> year student)
5. Yujin Wu (2<sup>nd</sup> year student)

## PAST GRADUATE STUDENTS (25)

1. Anis Kacem (2018), (PhD Computer Science, 2018) : *Novel Geometric Tools for Human Behavior Understanding*, Co-directed by B. Ben Amor (Associate Professor).  
Current situation: Research Associate, SnT - Interdisciplinary Centre for Security, Reliability and Trust, Université de Luxembourg.
2. Meng Meng (2017), (PhD Computer Science, 2017), Thesis: *Reconnaissance d'actions humaines et d'interaction avec l'objet*, Co-directed by H. Drira, J. Boonaert (Associate Professors).  
Current situation: Research Scientist, Black Sesame Technologies Inc. (USA)
3. Taleb Alashkar (2015), (PhD Computer Science, 2015), Thesis: *3D dynamic facial sequences analysis for face recognition and emotion detection*, Co-directed by B. Ben Amor.  
Current situation: Co-Founder of Algoface startup (USA).
4. Maxime Devanne (2015), Thesis: *Human behavior understanding by shape analysis of human motion and pose*. Current situation: Assistant Professor Université de Haute Alsace, France.
5. Rim Slama (PhD Computer Science, 2014), Thesis: *Geometric Approaches for 3D Human Motion Analysis: Application to Action Recognition and Retrieval* , Co-directed by H. Wannous (Assistant Professor).  
Current situation: Henallux Engineering School Pierrard, Belgium.
6. Baiqiang Xia (PhD Computer Science, 2014), Thesis: *Learning 3D Geometric Features for Soft-Biometrics Recognition*, Co-directed by B. Ben Amor (Associate Professor).  
Current situation: AI Scientist at Silo.AI in Helsinki.
7. Lahoucine Ballihi (PhD Computer Science, 2012), Thesis: *Biométrie faciale 3D par apprentissage des caractéristiques géométriques : Application à la reconnaissance des visages et à la classification du genre*, Co-directed by D. Aboutajdine (Professor University Mohamed V Rabat) and B. Ben Amor (Associate Professor).  
Current situation: Assistant Professor University Mohamed V, Morocco.
8. Rachid EL Khouri (PhD Computer Science, 2013), Thesis: *Indexation de modèles 3D par parties* , Co-directed by Jean-Philippe Vandeborre (Professor).  
Current situation: Assistant Professor The Lebanese University.
9. Pierre Lemaire (PhD Computer Science, 2011), Thesis: *Contributions à l'analyse de visages en 3D : Approche régions, approche holistique et étude de dégradations*, Co-directed by Professor Liming Chen (Professor Ecole Centrale Lyon).
10. Hedi Tabia (PhD Electrical Engineering, 2011), Thesis: *Contributions to 3D shape Matching, Retrieval and Classification*. Co-directed by O. Colot (Professor).  
Current situation: Professor at Université d'Évry, .
11. Hassen Drira (PhD Computer Science, 2011), Thesis: *Statistical Computing On Manifolds for 3D Face Analysis and Recognition*, Co-directed by B. Ben Amor (Associate Professor).  
Current situation: Associate Professor, Institut Mines-Télécom.
12. Halim Benhabiles (PhD Computer Science, 2011), Thesis: *3D-mesh segmentation : automatic evaluation and a new learning-based method*. Co-directed by B. Ben Amor (Associate Professor).  
Current situation: Assistant Professor, Icrea, France.
13. Ahmed Maalej, (PhD Computer Science, May 2012), Thesis: *3D Facial Expressions Recognition Using Shape Analysis and Machine Learning*, Co-directed by Boulbaba Ben Amor (Associate Professor). Current situation: Assistant Professor, Institut Supérieur de

Mathématiques Appliquées et d'informatique de Kairouan, Tunisia.

14. Julien Tierny, (PhD Computer Science, 2008), Thesis: *Reeb graph based 3D shape modeling and applications*. Co-directed by J.P. Vandeborre (Associate Professor).  
Current situation: CNRS Junior Researcher .
15. Sanaa El Fkihi (PhD Computer Science en co-tutelle 2008), Thesis: *Modèles probabilistes indexés par les arbres : Application à la détection de la peau dans les images couleur*, Co-directed by Professor D. Aboutajdine de l'University of Mohamed V, Morocco.  
Current situation: Assistant Professor (Ecole Nationale Supérieure en Informatique et Analyse des Systèmes (ENSIAS), Rabat, Morocco).
16. Chafik Samir, (PhD Computer Science, 2007), Thesis: *Analyse des déformations des visages 3D utilisant les chemins géodésiques dans l'espace des surfaces faciales*, Co-directed by Professor Anuj Srivastava from Floride State University (USA).  
Current situation: Assistant Professor (Clermont Ferrand University).
17. Tarik Filali Ansary, (PhD Computer Science, 2006), Thesis: *3D model retrieval using 2D characteristic views*, Co-directed by J.P. Vandeborre,  
Current situation: Director of Software Development, Store Electronic Systems, France.
18. Huicheng Zheng, (PhD Computer Science, 2004), Thesis: *Modèles de maximum d'entropie pour la détection de la peau: application au filtrage de l'internet*. Co-directed by Bruno Jedynek.  
Current situation: Associate Professor at Sun Yat-Sen University, China.
19. Said Mahmoudi, (PhD Computer Science, 2003), Thesis: *Indexation de formes planes : application, à la reconnaissance multi-vues de modèles 3D*.  
Current situation: Assistant at Faculté Polytechnique de Mons (Belgium).
20. Jean-Philippe Vandeborre, (PhD Computer Science, 2002), Thesis: *Modèles 3D : indexation, et habillage par textures extraites de photographies*. Co-directed by C. Chaillou,  
Situation: Professor at Institut Mines-Télécom.
21. Ahmed El Oirrak, (PhD Computer Science, 2001), Thesis: *Descriptions affinement invariantes des formes bidimensionnelles et tridimensionnelles*. Co-directed by M. D.Aboutajdine,  
Current situation: Associate Professor at Kadi Ayyad University Marrakech (Morocco).
22. Stanislaw Matusiak, (PhD Electrical Engineering, 1999), Thesis: *Description invariante et locale des formes planes, application à l'indexation d'une base d'images*.  
Current situation: Engineer
23. Ahmed El Oirrak, (PhD Computer Science, 1999), Thesis: *Reconnaissance d'objets utilisant les invariants et estimation de mouvement dans le cas affine*. Co-directed by D.Aboutajdine.  
Current situation: Associate Professor at Kadi Ayyad University Marrakech (Morocco).
24. Georges Vass, (PhD Electrical Engineering, 1998), Thesis: *Réseaux de neurones multicouches appliquées à la reconnaissance invariante des formes planes*.  
Current situation: Engineer at Nokia.
25. Ahmed Mokadem, (PhD Electrical Engineering, 1996 ), Thesis: *Distances entre formes : application au codage orienté objet*. Co-directed by Faouzi Ghorbel.  
Current situation: Independant Consultant.

## SERVED ON THESIS COMMITTEES OF STUDENTS

1. Yannick Wend Kuni Zoetgnande, University of Rennes1, 2020, *referee*.
2. Sarra Zaied, CentraleSupélec, 2020, *referee*.

3. Soumava Kumar Roy, The Australian National University, 2020, *referee*.
4. Samitha Herath, The Australian National University, 2020, *referee*.
5. Nasim Hajari, University of Alberta, 2019, *referee*.
6. Dawood Al Chanti, Université Grenoble Alpes, 2019, *referee*.
7. Adel Hafiane, Université d'Orléans, 2018, *referee*.
8. Rabah Iguernaissi, Aix Marseille Université, 2018, *referee*.
9. Cédric Fayet, Université de Rennes 1, 2018, *examiner*.
10. Stefanie Wuhrer, Université Grenoble Alpes, 2018, *referee*.
11. Rlu Hua, INSA de Rennes, 2018, *referee*.
12. Nicolas Hascoet, Telecom SudParis, 2017, *referee*.
13. Lazaros Zafeiriou, 2016, Imperial College of London, Computing Department, *referee*.
14. Jérôme Manceau, CentraleSupélec, 2016, *referee*.
15. Aichun Zhu, Université de Technologie de Troyes, 2016, *examiner*.
16. Cyrille Beaudry, Université de la Rochelle, 2015, *examiner*.
17. M. Paul Blondel, Amiens, Université de Picardie Jules Verne, 2015, *referee*.
18. Irène Kaltenmark, Université Paris-Saclay/ENS Cachan, 2015, *examiner*.
19. Viet Dang Quoc, September 2014, Computer Science, INPT (Toulouse), *chairman*.
20. Esma Elghoul, Computer Science, Telecom ParisTech, September 2014, *referee*.
21. Syed Zulkarnain, Computer science, ENSI Caen, December 2014, *chairman*.
22. M. Guoliang LUO, Computer science, Strasbourg University, November 4th 2014, *referee*.
23. Fattah Alizadeh, Computer Science, Dublin City University (Ireland), June 2014, *referee*.
24. Mohammad Ghavamzadeh, Computer Science, Habilitation à Diriger des Recherches, University of Lille1, June, 2014, *chairman*.
25. Bruno Jedynak, Applied Mathematics, Habilitation à Diriger des Recherches, University of Lille1, May, 2014, *examiner*.
26. Neslihan KOSE, Signal Processing, Eurecom/Telecom ParisTech, April 2014, *chairman*.
27. Ahlem Othmani, Images and Computer Science, University of Burgundy, May, 2014, *referee*.
28. Cyrille Fauchaux, Computer Science, University of Tours, December 2014, *referee*.
29. Catherine Soladie, Signal Processing and Telecommunications, Supélec Rennes, November 2013, *referee*.
30. Ricardo Uribe Lobello, Computer Science, University of Lyon1, December 2013, *examiner*.
31. Mohammed Hammami, Computer Science, Habilitation à Diriger des Recherches, University of Sfax (Tunisia), 2013, *referee*.
32. Adrien Malgo, Ecole Centrale de Paris, Computer Science, 2013, *examiner*.
33. Guillaume Lavoué, Habilitation à Diriger des Recherches, INSA Lyon, 2013, *chairman*.
34. Youssef Alj, INSA de Rennes, Computer Science, 2013, *chairman*.
35. Ayet Shaiek, Ecole Mines ParisTech, Electrical and Computer Engineering, 2013, *referee*.
36. Ouissem Ben Henia, Claude Bernard University Lyon 1, Computer Science, 2012, *referee*.
37. Andrei Brusuc, Ecole Mines ParisTech, Electrical and Computer Engineering, 2012, *referee*.
38. Cécile Fiche, Grenoble University, Signal - Images - Parole - Télécoms (SIPT), 2012, *referee*.
39. Nesli Erdogmus, Signal Processing, Eurecom/Telecom ParisTech, 2012, *examiner*.
40. Ouissem Ben Henia, Claude Bernard University, 2012, *chairman*.
41. Roseline Bénéière, Montpellier II University, Computer Science, 2012, *referee*.
42. Dianle Zhou, Telecom SudParis, 2011 *examiner*.
43. Tarak Ben Said, Ecole Nationale des Sciences de l'Informatique (Université de la Manouba,

- Tunisia), Computer Science, 2011.
44. Said Jai Andaloussi, Docteur de Télécom Bretagne en co-tutelle avec Faculté des Sciences Dhar El Mehraz Fez (Marocco), spécialité Informatique, 2010, *referee*.
  45. Philippe-Henri Gosselin, Habilitation à Diriger des Recherches (HDR), Cergy-Pontoise University, 2011, *chairman*.
  46. Mohamed El Abed, Caen University, Computer Science, 2011, *referee*.
  47. José Rouco, University of Coruna, Spain, 2011, *referee*.
  48. Ivica Arsov, Telecom SudParis, Computer Science, 2011, *examiner*.
  49. Tony Dujardine, Computer Science, Lille 1 University, 2010, *chairman*. item Thomas Colleu, Computer Science, Rennes 1 University, 2010, *chairman*.
  50. Youssef Bokhabrine, doctorat Instrumentation et Informatique de l'image, University of Burgundy, 2010, *referee*.
  51. Youssef Bokhabrine, Electrical and Computer Engineering, University of Burgundy, 2010, *referee*.
  52. Faisal Radhi M. Al-Osaimi, The University of Western Australia, 2010, *referee*.
  53. Cédric Syllebranque, Computer Science, Lille 1 University, 2010, *chairman*.
  54. Imane Daoudi, Computer Science, INSA Lyon/ Mohamed V University (Morocco), 2009, *referee*.
  55. Benjamin Lorient, Electrical and Computer Engineering, University of Burgundy, 2009, *referee*.
  56. Julien Olivier, Computer Science, Tours University, 2009, *referee*.
  57. Frank ter Haar, PhD Utrecht University, The Netherlands, 2009, *referee*.
  58. Thomas Batard, Applied Mathematics, La Rochelle University, 2009, *examiner*.
  59. Ahmed Chaari, Lille1 University, Electrical and Computer Engineering, 2009, *chairman*.
  60. Lew Yan Voon, Habilitation à Diriger des Recherches, University of Burgundy, 2008, *examiner*.
  61. Camille Izard, Applied Mathematics, Lille1 University, 2008, *chairman*.
  62. Grégoire Lefebvre, Bordeaux 2 University, 2007, *referee*.
  63. Mme Luce Morin, Habilitation à Diriger des Recherches, Rennes University, 2005, *examiner*.
  64. M. Julien Ricard, doctorat en Informatique, Lyon Claude Bernard University, 2005, *invited*.
  65. M. Kimcheng Kith, La Rochelle University, 2005, *referee*.
  66. M. Tony Tung, Telecom ParisTech, *referee*, 2005.
  67. M. Mohammed El Hassouni, Computer Science, University of Burgundy, *referee*, 2005.
  68. M. Laurent Chevalier, "*examiner*", Computer Science, Claude Bernard Lyon University, 2004, *examiner*.
  69. M. Oulad Haj Thami Rachid, Ben M'Sik University (Morocco), 2002, *referee*.
  70. Mme Corine Thomas, Computer Science, 2001 à Paris VII University, *referee*.
  71. M. Taoufik Gadi, Sidi Mohamed Ben Abdallah University (Fez, Morocco), 1998, *referee*,

## EDITORIAL BOARDS

- **Guest Editor** (with M. Harandi, V. Murinno), Special Issue on Learning with Manifolds in Computer Vision, Image and Vision Computing (2021).
- **Guest Editor** (avec R. Beveridge, C. Pelachaud, and R. Singh), Selected Best Works From Automated Face and Gesture Recognition 2019, Special Issue of IEEE Transactions

On Biometrics, Behavior, and Identity Science, Volume: 2 , Issue: 2 , April 2020.

- **Guest Editor** (with S. Berretti, P. Turaga, and A. Basu) of Special Issue on Representation, Analysis and Recognition of 3D Humans, ACM Transactions on Multimedia Computing, Communications, and Applications, 2017.
- **Associate Editor** of Image and Vision Computing Journal 2016 –.
- **Associate Editor** of IEEE Transactions on Multimedia 2018 –.
- **Associate Editor** of Journal of Imaging 2018 –.
- **Editorial Board member** of Annals of Telecommunications, 2010–2014.
- **Editorial Board member** of Journal of Multimedia, 2006–2009.
- **Guest Editor**, Annals of Telecommunications on Technologies and Tools for 3D imaging, Vol. 60, number 11-12, November-December 2005, with Gérard Eude (France Telecom R&D).

## PROFESSIONAL SERVICES

### CONFERENCE CHAIR

- General Chair of The 14th IEEE International Conference on Automatic Face and Gesture Recognition Lille, France, 14–18 May 2019.
- Program Chair of International Conference on Smart Multimedia, Toulon, France, August 24–26, 2018.
- General Chair of the second International Conference on Intelligent Systems and Computer Vision (ISCV’2017), Fez, Morocco, 17–19 April 2017 (Technically Co-Sponsored by IEEE Computer Science).
- Conference Chair of Shape Modeling International (SMI’15), June 24-26 2015, Lille, France.
- Summer School on 3D Processing: from Acquisition to Compression, <http://peyresq12.u-bourgogne.fr/>, June 24-30, Peyresq, 2012, (45 participants).
- Compression et Représentation des Signaux Audiovisuels CORESA, France, 2004 and 2012. (domestic conference)

### WORKSHOPS CHAIR

- Winter Conference on Applications of Computer Vision Workshop, Generation of Human Behavior, (GHB 2021)Waikoloa, Hawaii, Virtual Event, January 5-9 2021.
- International Conference on Pattern Recognition (ICPR) Workshop, Manifold Learning, From Euclid to Riemann, (ManLearn2020) Milan, Italy, 10 - 15 January 2021.
- ACM International Conference on Multimodal Interaction (ICMI) Workshop On Face and Gesture Analysis for Health Informatics, (FGAHI), October 25-29, 2020, Utrecht, the Netherlands.
- Conference on Computer Vision and Pattern Recognition (CVPR) Workshop On Face and Gesture Analysis for Health Informatics (FGAHI), June 16th - June 2019, Long Beach, CA.
- IEEE International Conference on Automatic Face and Gesture Recognition (IEEE FG) Workshop On Face and Gesture Analysis for Health Informatics (FGAHI), May 19, 2018, Xi’an, China 2018.



- International Conference on Computer Vision (ICCV) Workshop On Manifold Learning, From Euclid to Riemann, Venice, Italy October 22-29, 2017.
- International Conference on Pattern Recognition (ICPR) Workshop On Understanding Human Activities through 3D Sensors (UHA3DS'16), Mexico, 2016.
- IEEE FG workshop on (UHA3DS'15), Slovenia. IEEE FG 3D Face Biometrics, workshop, 2013, China.
- ACM-Multimedia Workshop on Human Gesture and Behavior Understanding HGBU, 2011, USA.
- ACM-Multimedia workshop on 3D Object Retrieval (3DOR), 2010, Italy, Eurographics 3DOR workshop, 2010, Sweden.
- EUROGRAPHICS Workshop on 3D Object Retrieval, May 2, 2010, Norrköping, Sweden, co-event of Eurographics 2010, (with Tobias Schreck).

## PROGRAM COMMITTEE MEMBER, CONFERENCES

- International Joint Conferences on Artificial Intelligence (IJCAI), Senior Membre committee: (2020, 2021).
- Association for the Advancement of Artificial Intelligence(AAAI) Conference on Artificial Intelligence (2020, 2021).
- Winter Conference on Applications of Computer Vision (WACV'2021).
- The 22nd ACM International Conference on Multimodal Interaction, ICMI 2020.
- Asian Conference on Computer Vision 2020. **reviewer**
- International Conference on Machine Learning (ICML 2020). **reviewer**.
- 15th IEEE International Conference on Automatic Face and Gesture Recognition (2020).
- IEEE Conference on Computer Vision and Pattern Recognition (CVPR 2018, 2019, 2020). **reviewer**
- European Conference on Computer Vision (ECCV 2018, 2020). **reviewer**
- International Conference on Computer Vision (2017, 2019). **reviewer**
- Eurographics Workshop on 3D Object Retrieval 3DOR (2015, 2016, 2017, 2018, 2019, 2020).
- British Machine Vision Conference (2018, 2019). **reviewer**
- European Conference on Computer Vision (2018, 2020). **reviewer**
- International Conference on Image Processing (2016, 2017, 2018, 2019, 2020). **reviewer**
- ACM International Conference on Multimedia 2018. **reviewer**
- The 22nd International Conference on Pattern Recognition (ICPR 2014).
- IEEE International Conference on Multimedia & Expo (ICME) (2012, 2014).
- IEEE International Workshop on Hot Topics in 3D (in conjunction with ICME'13, 15,16).
- International Conference on Multimedia Modeling, 2012, IEEE IVMSWP Workshop on 3D Image/Video Technologies and Applications, 2013.
- SPIE, 3D Image Processing (3DIP) and Applications (2010–), San Francisco.
- The 18th International MultiMedia Modeling Conference (MMM2012), January 4-6, 2012, Klagenfurt University, Klagenfurt, Austria.
- VISAPP 2012 (International Conference on Computer Vision Theory and Applications), 24-26 February, 2012, Roma, Italy.
- International Conference on Pattern Recognition, Cambridge, UK, 2004.
- International Symposium on Image/Video Communications over fixed and mobile networks, (Morocco 2002, France 2004, Tunisia 2006, Spain 2008).

- IEEE International Conference on Multimedia & Expo (ICME) (Amsterdam 2005, Taipei 2004).

## AREA CHAIR

- Area Chair for Image and video processing), European Signal Processing Conference, 2015 (Nice).
- Area Chair for European Signal Processing Conference, 2013 (Marrakech).

## PARTICIPATION IN INTERNATIONAL COMMITTEES

Member Industrial Liaison Committee, The International Association for Pattern Recognition (IAPR)(2017-).

## GRANT REVIEWER WORK FOR GOVERNMENTAL AGENCIES

- French National Research Agency (ANR) (2013, 2018, 2020).
- French National Research Agency (ANR) CHIST-ERA Call 2012 - Intelligent User Interfaces.
- Academy of Finland (Centre of Excellence Programme), 2020.
- Academy of Finland (Natural Sciences and Engineering Research Unit), review panel for research proposals in the fields of computer vision, image processing, speech processing and acoustics, 2018.
- Call doctoral contract funded by The Initiative of Excellence (IdEx), University of Strasbourg, 2017.
- Qatar National Research Fund (QNRF), 2014, 2015, 2018, 2020.
- The New Eurasia Foundation (FNE), (Russia), 2015, 2017.
- Call Laboratory of Excellence (Labex) PATRIMA, Thesis Funding, universities of Cergy-Pontoise (UCP) and Versailles - Saint-Quentin-en-Yvelines (UVSQ), 2013.
- The Luxembourg National Research Fund (FNR), 2014.
- French National Research Agency (ANR) Call Chair of Excellence, 2010.
- French National Research Agency (ANR) Call for proposal Equipment of excellence, 2010.
- The Vienna Science and Technology Fund (WWTF), ICT Call 2010, (Austria).
- The Netherlands Organization for Scientific Research (NWO), 2005. EQUIPEX 2010

## INVITED PRESENTATIONS

### TUTORIALS AND COURSES

- Tutorial on 3D Shape Analysis at 3D Processing from the Acquisition to Compression Summer School, Peyresq, June 2012.

### INVITED CONFERENCE AND WORKSHOP PRESENTATIONS

- Keynote speaker, The 2nd International Conference on Electronics, Control, Optimization and Computer Science : (ICECOCS'20), December 2nd-3rd 2020, Kenitra, Morocco.
- Keynote speaker, Data Engineering In Bioinformatics, Image and Data Analysis, First Conference of The Moroccan Classification Society, March 2017 Tangier, Morocco.

- Keynote Speaker, The International Conference on Intelligent Systems and Computer Vision (ISCV2015) 2015, Fez, Morocco .
- Invited speaker, The 4th European Workshop Visual Information Processing, Paris, France, 2013.
- Invited Panelist on 3D Media Analysis and Retrieval, IEEE International Conference on Multimedia & Expo (ICME), Barcelona, Spain, 2011.
- Invited speaker,, 11th DELOS Thematic Workshop on Visual and Multimedia Digital Libraries, 2007 - Modena, Italy, in conjunction with the 14th International Conference on Image Analysis and Processing (ICIAP 2007).
- Invited Panelist on Trend in Visual Information Retrieval, workshop on Multimedia Information systems, Istanbul, Turkey, 1998.

## INVITED SPEAKER AND PRESENTATIONS AT UNIVERSITIES

- Seminar at University of Barcelona, Computer Vision Center UAB, July 2019.
- Seminar at Computer Vision and Behaviour Analysis Lab, Universitat Politècnica de València, July 2019.
- Seminar at PAVIS - Pattern Analysis & Computer Vision IIT Istituto Italiano di Tecnologia, Italy, January 2018.
- Seminar at Imperial College of London, February 2016.
- Tutorial at the International Summer school, Facial biometrics and applications, 2015, Paris.
- Keynote speaker at The International Conference on Intelligent Systems and Computer Vision 2015, Fez, Morocco (Technically Co-Sponsored by IEEE Computer Science).
- Invited Speaker at The 4th European Workshop Visual Information Processing, Paris, 2013.
- Invited Panelist (3D Media Analysis and Retrieval) at IEEE ICME, Barcelona, Spain, 2011.
- Seminar at University of La Rochelle (France), October 2009.
- Keynote speaker at the 2èmes Journées Doctorales en Technologies de l'Information et de la Communication, July 2010, Fez, Morocco.
- Seminar at TU Darmstadt (Germany), the Interactive Graphics Systems Group, 2008.

## TEACHING

- Deep Learning and Computer Vision, 2014 –
- Graphs and Markov Chain, 2014–
- Master Multimedia and Networking program (2008–2014)
- 3D Shape Analysis (3D Technologies master program), 2008–.
- Multimedia Information retrieval (Master Multimedia and Networking program), 2008–2014.
- Master Multimedia Engineering Program (1996 – 2004).
- Distributed systems (2005 – 2010)
- Artificial Intelligence (2004 – 2005).
- Data structures in C language (1994 – 2013).
- C language programming (1994 – 2003).
- Mathematics for computer science (2004).
- Multimedia Information retrieval (2005 –).

- Pattern recognition and Neural Networks (1994 – 2004).

## PUBLICATIONS

### PUBLISHED/ACCEPTED JOURNAL ARTICLES

- [1] Taleb Alashkar, Boulbaba Ben Amor, **Mohamed Daoudi**, and Stefano Berretti. A grassmann framework for 4D facial shape analysis. *Pattern Recognition*, 57:21–30, 2016.
- [2] Taleb Alashkar, Boulbaba Ben Amor, **Mohamed Daoudi**, and Stefano Berretti. Spontaneous expression detection from 3D dynamic sequences by analyzing trajectories on Grassmann manifolds. *IEEE Transactions on Affective Computing*, 9(2):271–284, 2018.
- [3] Halim Benhabiles, Guillaume Lavoué, Jean-Philippe Vandeborre, and **Mohamed Daoudi**. Learning boundary edges for 3D-mesh segmentation. *Comput. Graph. Forum*, 30(8):2170–2182, 2011.
- [4] Halim Benhabiles, Guillaume Lavoué, Jean-Philippe Vandeborre, and **Mohamed Daoudi**. Learning boundary edges for 3D-mesh segmentation. *Computer Graphics Forum - Eurographics Association*, 2011.
- [5] Halim Benhabiles, Jean-Philippe Vandeborre, Guillaume Lavoué, and **Mohamed Daoudi**. A comparative study of existing metrics for 3D-mesh segmentation evaluation. *The Visual Computer - International Journal of Computer Graphics*, 26(12):1451–1466, 2010.
- [6] Stefano Berretti, Boulbaba Ben Amor, **Mohamed Daoudi**, and Alberto Del Bimbo. 3D facial expression recognition using sift descriptors of automatically detected keypoints. *The Visual Computer*, 27(11):1021–1036, 2011.
- [7] Stefano Berretti, **Mohamed Daoudi**, Pavan Turaga, and Anup Basu. Introduction to the special issue on representation, analysis, and recognition of 3D humans. *ACM Transactions on Multimedia Computing, Communications and Applications*, 14(1s):15:1–15:2, 2018.
- [8] Paul Audain Desrosiers, Yasmine Bennis, **Mohamed Daoudi**, Boulbaba Ben Amor, and Pierre Guerreschi. Analyzing of facial paralysis by shape analysis of 3D face sequences. *Image Vision Comput.*, 67:67–88, 2017.
- [9] Maxime Devanne, Stefano Berretti, Pietro Pala, Hazem Wannous, **Mohamed Daoudi**, and Alberto Del Bimbo. Motion segment decomposition of RGB-D sequences for human behavior understanding. *Pattern Recognition*, 61:222–233, 2017.
- [10] Maxime Devanne, Hazem Wannous, Stefano Berretti, Pietro Pala, **Mohamed Daoudi**, and Alberto Del Bimbo. 3D human action recognition by shape analysis of motion trajectories on riemannian manifold. *IEEE Trans. Cybernetics*, 45(7):1340–1352, 2015.
- [11] Hassen Drira, Boulbaba Ben Amor, Anuj Srivastava, **Mohamed Daoudi**, and Rim Slama. 3D face recognition under expressions, occlusions, and pose variations. *IEEE Trans. Pattern Anal. Mach. Intell.*, 35(9):2270–2283, 2013.

- [12] Tarik Filali-Ansary, **Mohamed Daoudi**, and Jean-Philippe Vandeborre. A bayesian 3D search engine using adaptive views clustering. *IEEE Transactions on Multimedia*, 9(1):78–88, January 2007.
- [13] Tarik Filali-Ansary, Jean-Philippe Vandeborre, and **Mohamed Daoudi**. A framework for 3D CAD models retrieval from 2D images. *Annales des Télécommunications*, 60(11-12):1337–1359, 2005.
- [14] Sanaa El Fkihi, **Mohamed Daoudi**, and Driss Aboutajdine. The mixture of k-optimal-spanning-trees based probability approximation: Application to skin detection. *Image Vision Computing*, 26(12):1574–1590, 2008.
- [15] Bruno Jedynak, Huicheng Zheng, and **Mohamed Daoudi**. Skin detection using pairwise models. *Image Vision and Computing*, 23(13):1122–1130, November 2005.
- [16] Anis Kacem, **Mohamed Daoudi**, Boulbaba Ben Amor, Stefano Berretti, and Juan Carlos Álvarez Paiva. A novel geometric framework on gram matrix trajectories for human behavior understanding. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 42(1):1–14, 2020.
- [17] Zhouhui Lian, Afzal Godil, Benjamin Bustos, **Mohamed Daoudi**, Jeroen Hermans, Shun Kawamura, Yukinori Kurita, Guillaume Lavoué, Hien Van Nguyen, Ryutarou Ohbuchi, Yuki Ohkita, Yuya Ohishi, Fatih Porikli, Martin Reuter, Ivan Sipiran, Dirk Smeets, Paul Suetens, Hedi Tabia, and Dirk Vandermeulen. A comparison of methods for non-rigid 3D shape retrieval. *Pattern Recognition*, 46(1):449–461, 2013.
- [18] Elmustapha Ait Lmaati, Ahmed El Oirrak, Driss Aboutajdine, **Mohamed Daoudi**, and Mohamed Najib Kaddioui. A 3-d search engine based on fourier series. *Computer Vision and Image Understanding*, 114(1):1–7, January 2010.
- [19] Ahmed Maalej, Boulbaba Ben Amor, **Mohamed Daoudi**, Anuj Srivastava, and Stefano Berretti. Shape analysis of local facial patches for 3D facial expression recognition. *Pattern Recognition*, 44(8):1581–1589, 2011.
- [20] Said Mahmoudi and **Mohamed Daoudi**. A probabilistic approach for 3D shape retrieval by characteristic views. *Pattern Recognition Letters*, 28(13):1705–1718, October 2007.
- [21] Abderrahim Mesbah, Aissam Berrahou, Hicham Hammouchi, Hassan Berbia, Hassan Qjidaa, and **Mohamed Daoudi**. Lip reading with hahn convolutional neural networks. *Image and Vision Computing*, 88:76 – 83, 2019.
- [22] Ahmed El Oirrak, **Mohamed Daoudi**, and Driss Aboutajdine. Affine invariant descriptors using fourier series. *Pattern Recognition Letters*, 23(10):1109–1118, 2002.
- [23] Ahmed El Oirrak, **Mohamed Daoudi**, and Driss Aboutajdine. Estimation of general 2d affine motion using fourier descriptors. *Pattern Recognition*, 35(1):223–228, 2002.
- [24] Naima Otberdout, Anis Kacem, **Mohamed Daoudi**, Lahoucine Ballihi, and Stefano Berretti. Automatic analysis of facial expressions based on deep covariance trajectories. *IEEE Transactions on Neural Networks and Learning Systems*, pages 1–14, 2019.

- [25] Naima Otberdout, **Mohamed Daoudi**, Anis Kacem, Lahoucine Ballihi, and Stefano Berretti. Dynamic facial expression generation on Hilbert hypersphere with conditional Wasserstein Generative Adversarial nets. *IEEE Transactions on Pattern Analysis and Machine Intelligence (Minor revision)*, CoRR, abs/1907.10087, 2020.
- [26] Chafik Samir, Anuj Srivastava, and **Mohamed Daoudi**. Three-dimensional face recognition using shapes of facial curves. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 28(11):1858–1863, 2006.
- [27] Chafik Samir, Anuj Srivastava, **Mohamed Daoudi**, and Eric Klassen. An intrinsic framework for analysis of facial surfaces. *International Journal of Computer Vision*, 82(1):80–95, 2009.
- [28] Rim Slama, Hazem Wannous, and **Mohamed Daoudi**. 3D human motion analysis framework for shape similarity and retrieval. *Image Vision Comput.*, 32(2):131–154, 2014.
- [29] Rim Slama, Hazem Wannous, **Mohamed Daoudi**, and Anuj Srivastava. Accurate 3D action recognition using learning on the grassmann manifold. *Pattern Recognition*, 48(2):556–567, 2015.
- [30] Anuj Srivastava, Chafik Samir, Shantanu H.Joshi, and **Mohamed Daoudi**. Elastic shape models for face analysis using curvilinear coordinates. *Journal of Mathematical Imaging and Vision*, 33(2):253–265, February 2009.
- [31] Hedi Tabia, Mohamed Daoudi, **Mohamed Daoudi**, and Jean-Philippe Vandeborre. Three-dimensional object retrieval based on vector quantization of invariant descriptors. *SPIE Journal of Electronic Imaging*, 21(2):023011–1–023011–8, April-June 2012.
- [32] Hedi Tabia, Mohamed Daoudi, Jean-Philippe Vandeborre, and Olivier Colot. A new 3D-matching method of non-rigid and partially similar models using curve analysis. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 33(4):852–858, 2011.
- [33] Hedi Tabia, **Mohamed Daoudi**, Jean-Philippe Vandeborre, and Olivier Colot. A parts-based approach for automatic 3D shape categorization using belief functions. *ACM TIST*, 4(2):33, 2013.
- [34] **Mohamed Daoudi**, Faouzi Ghorbel, Ahmed Mokadem, Olivier Avaro, and Henri Sanson. Shape distances for contour tracking and motion estimation. *Pattern Recognition*, 32(7):1297–1306, 1999.
- [35] **Mohamed Daoudi** and Stanislaw Matusiak. Visual image retrieval by multiscale description of user sketches. *J. Vis. Lang. Comput.*, 11(3):287–301, 2000.
- [36] Julien Tierny, Jean-Philippe Vandeborre, and **Mohamed Daoudi**. Enhancing 3D mesh topological skeletons with discrete contour constrictions. *The Visual Computer - International Journal of Computer Graphics*, 24(3):155–172, March 2008.
- [37] Julien Tierny, Jean-Philippe Vandeborre, and **Mohamed Daoudi**. Partial 3D shape retrieval by Reeb pattern unfolding. *Computer Graphics Forum - Eurographics Association*, 28(1):41–55, March 2009.

- [38] Alice Barbara Tumpach, Hassen Drira, **Mohamed Daoudi**, and Anuj Srivastava. Gauge invariant framework for shape analysis of surfaces. *IEEE Trans. Pattern Anal. Mach. Intell.*, 38(1):46–59, 2016.
- [39] Baiqiang Xia, Boulbaba Ben Amor, Hassen Drira, **Mohamed Daoudi**, and Lahoucine Ballihi. Combining face averageness and symmetry for 3D-based gender classification. *Pattern Recognition*, 48(3):746–758, 2015.
- [40] Baiqiang Xia, Boulbaba Ben Amor, and **Mohamed Daoudi**. Joint gender, ethnicity and age estimation from 3D faces: An experimental illustration of their correlations. *Image Vision Comput.*, 64:90–102, 2017.
- [41] Qingkai Zhen, Di Huang, Hassen Drira, Boulbaba Ben Amor, Yunhong Wang, and **Mohamed Daoudi**. Magnifying subtle facial motions for effective 4D expression recognition. *IEEE Transactions on Affective Computing*, pages 1–1, 2020.

## SELECTED CONFERENCE PAPERS

- [42] Eman A. Abdel-Ghaffar and **Mohamed Daoudi**. Emotion recognition from multidimensional electroencephalographic signals on the manifold of symmetric positive definite matrices. In *3rd IEEE Conference on Multimedia Information Processing and Retrieval, MIPR 2020, August 6-8, Shenzhen, Guangdong, China, 28-30, 2019*.
- [43] Taleb Alashkar, Boulbaba Ben Amor, Stefano Berretti, and **Mohamed Daoudi**. Analyzing trajectories on grassmann manifold for early emotion detection from depth videos. In *11th IEEE International Conference and Workshops on Automatic Face and Gesture Recognition, FG 2015, Ljubljana, Slovenia, May 4-8, 2015*, pages 1–6, 2015.
- [44] Taleb Alashkar, Boulbaba Ben Amor, **Mohamed Daoudi**, and Stefano Berretti. A grassmannian framework for face recognition of 3D dynamic sequences with challenging conditions. In *Computer Vision - ECCV 2014 Workshops - Zurich, Switzerland, September 6-7 and 12, 2014, Proceedings, Part IV*, pages 326–340, 2014.
- [45] Tarik Filali Ansary, **Mohamed Daoudi**, and Jean-Philippe Vandeborre. 3d model retrieval based on adaptive views clustering. In *Pattern Recognition and Image Analysis, Third International Conference on Advances in Pattern Recognition, ICAPR 2005, Bath, UK, August 22-25, 2005, Proceedings, Part II*, pages 473–483, 2005.
- [46] Tarik Filali Ansary, Jean-Philippe Vandeborre, Saïd Mahmoudi, and **Mohamed Daoudi**. A bayesian framework for 3D models retrieval based on characteristic views. In *2nd International Symposium on 3D Data Processing, Visualization and Transmission (3DPVT 2004), 6-9 September 2004, Thessaloniki, Greece*, pages 139–146, 2004.
- [47] Tarik Filali Ansary, Jean-Philippe Vandeborre, and **Mohamed Daoudi**. A bayesian approach for 3D models retrieval based on characteristic views. In *17th International Conference on Pattern Recognition, ICPR 2004, Cambridge, UK, August 23-26, 2004.*, pages 898–901, 2004.
- [48] Tarik Filali Ansary, Jean-Philippe Vandeborre, and **Mohamed Daoudi**. On 3D retrieval from photos. In *3rd International Symposium on 3D Data Processing, Visualization and Transmission (3DPVT 2006), 14-16 June 2006, Chapel Hill, North Carolina, USA*, pages 687–694, 2006.

- [49] Tarik Filali Ansary, Jean-Philippe Vandeborre, and **Mohamed Daoudi**. 3D-model search engine from photos. In *Proceedings of the 6th ACM International Conference on Image and Video Retrieval, CIVR 2007, Amsterdam, The Netherlands, July 9-11, 2007*, pages 89–92, 2007.
- [50] Lahoucine Ballihi, Boulbaba Ben Amor, **Mohamed Daoudi**, Anuj Srivastava, and Driss Aboutajdine. Selecting 3D curves on the nasal surface using adaboost for person authentication. In *Eurographics Workshop on 3D Object Retrieval 2011, Llandudno, UK, April 10, 2011. Proceedings*, pages 101–104, 2011.
- [51] Lahoucine Ballihi, Boulbaba Ben Amor, **Mohamed Daoudi**, Anuj Srivastava, and Driss Aboutajdine. Geometric based 3D facial gender classification. In *5th International Symposium on Communications, Control and Signal Processing, ISCCSP 2012, Roma, Italy, May 2-4, 2012*, pages 1–5, 2012.
- [52] Lahoucine Ballihi, Adel Lablack, Boulbaba Ben Amor, Ioan Marius Bilasco, and **Mohamed Daoudi**. Positive/negative emotion detection from RGB-D upper body images. In *Face and Facial Expression Recognition from Real World Videos - International Workshop, FFER@ICPR 2014, Stockholm, Sweden, August 24, 2014, Revised Selected Papers*, pages 109–120, 2014.
- [53] Lahoucine Ballihi, Anuj Srivastava, Boulbaba Ben Amor, **Mohamed Daoudi**, and Driss Aboutajdine. Which 3D geometric facial features give up your identity? In *5th IAPR International Conference on Biometrics, ICB 2012, New Delhi, India, March 29 - April 1, 2012*, pages 119–124, 2012.
- [54] Halim Benhabiles, Guillaume Lavoué, Jean-Philippe Vandeborre, and **Mohamed Daoudi**. A subjective experiment for 3D-mesh segmentation evaluation. In *2010 IEEE International Workshop on Multimedia Signal Processing, MMSP 2010, Saint Malo, France, October 4-6, 2010*, pages 356–360, 2010.
- [55] Halim Benhabiles, Guillaume Lavoué, Jean-Philippe Vandeborre, and **Mohamed Daoudi**. Kinematic skeleton extraction based on motion boundaries for 3D dynamic meshes. In *Eurographics Workshop on 3D Object Retrieval 2012, Cagliari, Italy, May 13, 2012. Proceedings*, pages 71–76, 2012.
- [56] Halim Benhabiles, Jean-Philippe Vandeborre, Guillaume Lavoué, and **Mohamed Daoudi**. A framework for the objective evaluation of segmentation algorithms using a ground-truth of human segmented 3D-models. In *IEEE International Conference on Shape Modeling and Applications, SMI 2009, Beijing, China, 26-28 June 2009*, pages 36–43, 2009.
- [57] Stefano Berretti, Boulbaba Ben Amor, **Mohamed Daoudi**, and Alberto Del Bimbo. Person independent 3D facial expression recognition by a selected ensemble of SIFT descriptors. In Mohamed Daoudi, Tobias Schreck, Michela Spagnuolo, Ioannis Pratikakis, Remco C. Veltkamp, and Theoharis Theoharis, editors, *Eurographics Workshop on 3D Object Retrieval, Norrköping, Sweden, May 2, 2010, Proceedings*, pages 47–54. Eurographics Association, 2010.
- [58] Stefano Berretti, Alberto Del Bimbo, Pietro Pala, Boulbaba Ben Amor, and **Mohamed Daoudi**. A set of selected SIFT features for 3D facial expression recognition. In *20th*



*International Conference on Pattern Recognition, ICPR 2010, Istanbul, Turkey, 23-26 August 2010*, pages 4125–4128, 2010.

- [59] Oussema Bouafif, Bogdan Khomutenko, and **Mohamed Daoudi**. Monocular 3D head reconstruction via prediction and integration of normal vector field. In *Proceedings of the 14th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications-Volume 5: VISAPP, Valletta, Malta*, pages 359–369, 2020.
- [60] Oussema Bouafif, Bogdan Khomutenko, and **Mohamed Daoudi**. Hybrid approach for 3d head reconstruction: Using neural networks and visual geometry. In *Proceedings of 25th International Conference on Pattern Recognition, Milano ITALY, 10 - 15 January 2021*, 2021.
- [61] Ettore Maria Celozzi, Luca Ciabini, Luca Cultrera, Pietro Pala, **Mohamed Daoudi** Stefano Berretti, and Alberto Del Bimbo. Modelling the statistics of cyclic activities by trajectory analysis on the manifold of positive-semi-definite matrices. In *15th IEEE International Conference on Automatic Face & Gesture Recognition, FG 2020, Buenos Aires, Argentina, May 18-22, 2020*.
- [62] Stéphane Derrode, **Mohamed Daoudi**, and Faouzi Ghorbel. Invariant content-based image retrieval using a complete set of fourier-mellin descriptors. In *IEEE International Conference on Multimedia Computing and Systems, ICMCS 1999, Florence, Italy, June 7-11, 1999. Volume II*, pages 877–881, 1999.
- [63] Paul Audain Desrosiers, Yasmine Bennis, Boulbaba Ben Amor, **Mohamed Daoudi**, and Pierre Guerreschi. Facial asymmetry assessment from 3D shape sequences: The clinical case of facial paralysis. In *Proceedings of the 11th Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications (VISIGRAPP 2016) - Volume 4: VISAPP, Rome, Italy, February 27-29, 2016.*, pages 30–38, 2016.
- [64] Paul Audain Desrosiers, **Mohamed Daoudi**, and Maxime Devanne. Novel generative model for facial expressions based on statistical shape analysis of landmarks trajectories. In *23rd International Conference on Pattern Recognition, ICPR 2016, Cancún, Mexico, December 4-8, 2016*, pages 961–966, 2016.
- [65] Maxime Devanne, Hazem Wannous, Stefano Berretti, Pietro Pala, **Mohamed Daoudi**, and Alberto Del Bimbo. Space-time pose representation for 3D human action recognition. In *New Trends in Image Analysis and Processing - ICIAP 2013 - ICIAP 2013 International Workshops, Naples, Italy, September 9-13, 2013. Proceedings*, pages 456–464, 2013.
- [66] Maxime Devanne, Hazem Wannous, Pietro Pala, Stefano Berretti, **Mohamed Daoudi**, and Alberto Del Bimbo. Combined shape analysis of human poses and motion units for action segmentation and recognition. In *11th IEEE International Conference and Workshops on Automatic Face and Gesture Recognition, FG 2015, Ljubljana, Slovenia, May 4-8, 2015*, pages 1–6, 2015.
- [67] Maxime Devanne, Hazem Wannous, **Mohamed Daoudi**, Stefano Berretti, Alberto Del Bimbo, and Pietro Pala. Learning shape variations of motion trajectories for gait analysis.

- In *23rd International Conference on Pattern Recognition, ICPR 2016, Cancún, Mexico, December 4-8, 2016*, pages 895–900, 2016.
- [68] Hassen Drira, Boulbaba Ben Amor, Anuj Srivastava, and **Mohamed Daoudi**. A riemannian analysis of 3D nose shapes for partial human biometrics. In *IEEE 12th International Conference on Computer Vision, ICCV 2009, Kyoto, Japan, September 27 - October 4, 2009*, pages 2050–2057, 2009.
  - [69] Hassen Drira, Boulbaba Ben Amor, **Mohamed Daoudi**, and Stefano Berretti. A dense deformation field for facial expression analysis in dynamic sequences of 3D scans. In *Human Behavior Understanding - 4th International Workshop, HBU 2013, Barcelona, Spain, October 22, 2013. Proceedings*, pages 148–159, 2013.
  - [70] Hassen Drira, Boulbaba Ben Amor, **Mohamed Daoudi**, and Anuj Srivastava. Nasal region contribution in 3D face biometrics using shape analysis framework. In *Advances in Biometrics, Third International Conference, ICB 2009, Alghero, Italy, June 2-5, 2009. Proceedings*, pages 357–366, 2009.
  - [71] Hassen Drira, Boulbaba Ben Amor, **Mohamed Daoudi**, and Anuj Srivastava. Pose and expression-invariant 3D face recognition using elastic radial curves. In *British Machine Vision Conference, BMVC 2010, Aberystwyth, UK, August 31 - September 3, 2010. Proceedings*, pages 1–11, 2010.
  - [72] Hassen Drira, Boulbaba Ben Amor, **Mohamed Daoudi**, Anuj Srivastava, and Stefano Berretti. 3D dynamic expression recognition based on a novel deformation vector field and random forest. In *Proceedings of the 21st International Conference on Pattern Recognition, ICPR 2012, Tsukuba, Japan, November 11-15, 2012*, pages 1104–1107, 2012.
  - [73] Sanaa El Fkihi, **Mohamed Daoudi**, and Driss Aboutajdine. Probability approximation using best-tree distribution for skin detection. In *Advanced Concepts for Intelligent Vision Systems, 8th International Conference, ACIVS 2006, Antwerp, Belgium, September 18-21, 2006. Proceedings*, pages 767–775, 2006.
  - [74] Sanaa El Fkihi, **Mohamed Daoudi**, and Driss Aboutajdine. Optimal spanning trees mixture based probability approximation for skin detection. In *VISAPP 2007: Proceedings of the Second International Conference on Computer Vision Theory and Applications, Barcelona, Spain, March 8-11, 2007 - Volume 1*, pages 382–385, 2007.
  - [75] Sanaa El Fkihi, **Mohamed Daoudi**, and Driss Aboutajdine. Skin and non-skin probability approximation based on discriminative tree distribution. In *Proceedings of the International Conference on Image Processing, ICIP 2009, 7-10 November 2009, Cairo, Egypt*, pages 2377–2380, 2009.
  - [76] Faouzi Ghorbel, **Mohamed Daoudi**, A. Mokadem, Olivier Avaro, and Henri Sanson. Global planar rigid motion estimation applied to object-oriented coding. In *13th International Conference on Pattern Recognition, ICPR 1996, Vienna, Austria, 25-19 August, 1996*, pages 641–645, 1996.
  - [77] Bruno Jedynak, Huicheng Zheng, and **Mohamed Daoudi**. Maximum entropy models for skin detection. In *Energy Minimization Methods in Computer Vision and Pattern Recognition, 4th International Workshop, EMMCVPR 2003, Lisbon, Portugal, July 7-9, 2003. Proceedings*, pages 180–193, 2003.

- [78] Bruno Jedynak, Huicheng Zheng, and **Mohamed Daoudi**. Statistical models for skin detection. In *IEEE Conference on Computer Vision and Pattern Recognition, CVPR Workshops 2003, Madison, Wisconsin, USA, 16-22 June, 2003*, page 92, 2003.
- [79] Bruno Jedynak, Huicheng Zheng, **Mohamed Daoudi**, and Didier Barret. Maximum entropy models for skin detection. In *ICVGIP 2002, Proceedings of the Third Indian Conference on Computer Vision, Graphics & Image Processing, Ahmadabad, India, December 16-18, 2002*, 2002.
- [80] Anis Kacem, Zakia Hammal, **Mohamed Daoudi**, and Jeffrey F. Cohn. Detecting depression severity by interpretable representations of motion dynamics. In *13th IEEE International Conference on Automatic Face & Gesture Recognition, FG 2018, Xi'an, China, May 15-19, 2018*, pages 739–745, 2018.
- [81] Anis Kacem, **Mohamed Daoudi**, and Juan-Carlos Alvarez-Paiva. Barycentric representation and metric learning for facial expression recognition. In *IEEE International Conference on Automatic Face and Gesture Recognition (FG 2018)*, Xi'an, China, May 2018.
- [82] Anis Kacem, **Mohamed Daoudi**, Boulbaba Ben Amor, and Juan Carlos Álvarez Paiva. A novel space-time representation on the positive semidefinite cone for facial expression recognition. In *IEEE International Conference on Computer Vision, ICCV 2017, Venice, Italy, October 22-29, 2017*, pages 3199–3208, 2017.
- [83] Rachid El Khoury, Jean-Philippe Vandeborre, and **Mohamed Daoudi**. 3D mesh reeb graph computation using commute-time and diffusion distances. In *Three-Dimensional Image Processing (3DIP) and Applications II, Burlingame, California, USA, January 22, 2012*, page 82900H, 2012.
- [84] Rachid El Khoury, Jean-Philippe Vandeborre, and **Mohamed Daoudi**. Indexed heat curves for 3D-model retrieval. In *Proceedings of the 21st International Conference on Pattern Recognition, ICPR 2012, Tsukuba, Japan, November 11-15, 2012*, pages 1964–1967, 2012.
- [85] Rachid El Khoury, Jean-Philippe Vandeborre, and **Mohamed Daoudi**. 3D-model retrieval using bag-of-features based on closed curves. In *Eurographics Workshop on 3D Object Retrieval, Girona, Spain, 2013. Proceedings*, pages 101–104, 2013.
- [86] Guillaume Lavoué, Jean-Philippe Vandeborre, Halim Benhabiles, **Mohamed Daoudi**, K. Huebner, Michela Mortara, and Michela Spagnuolo. Shrec'12 track: 3D mesh segmentation. In *Eurographics Workshop on 3D Object Retrieval 2012, Cagliari, Italy, May 13, 2012. Proceedings*, pages 93–99, 2012.
- [87] Pierre Lemaire, Mohsen Ardabilian, Liming Chen, and **Mohamed Daoudi**. Fully automatic 3D facial expression recognition using differential mean curvature maps and histograms of oriented gradients. In *10th IEEE International Conference and Workshops on Automatic Face and Gesture Recognition, FG 2013, Shanghai, China, 22-26 April, 2013*, pages 1–7, 2013.
- [88] Zhouhui Lian, Afzal Godil, Benjamin Bustos, **Mohamed Daoudi**, Jeroen Hermans, Shun Kawamura, Yukinori Kurita, Guillaume Lavoué, Hien Van Nguyen, Ryutarou Ohbuchi,

- Yuki Ohkita, Yuya Ohishi, Fatih Porikli, Martin Reuter, Ivan Sipiran, Dirk Smeets, Paul Suetens, Hedi Tabia, and Dirk Vandermeulen. SHREC '11 track: Shape retrieval on non-rigid 3D watertight meshes. In *Eurographics Workshop on 3D Object Retrieval 2011, Llandudno, UK, April 10, 2011. Proceedings*, pages 79–88, 2011.
- [89] Ahmed Maalej, Boulbaba Ben Amor, **Mohamed Daoudi**, Anuj Srivastava, and Stefano Berretti. Local 3D shape analysis for facial expression recognition. In *20th International Conference on Pattern Recognition, ICPR 2010, Istanbul, Turkey, 23-26 August 2010*, pages 4129–4132, 2010.
- [90] Saïd Mahmoudi and **Mohamed Daoudi**. 3D models retrieval and indexing. In *Proceedings of the 6th Joint Conference on Information Science, March 8-13, 2002, Research Triangle Park, North Carolina, USA*, pages 972–975, 2002.
- [91] Saïd Mahmoudi and **Mohamed Daoudi**. 3D models retrieval by using characteristic views. In *16th International Conference on Pattern Recognition, ICPR 2002, Quebec, Canada, August 11-15, 2002.*, pages 457–460, 2002.
- [92] Saïd Mahmoudi and **Mohamed Daoudi**. Partial shape retrieval by m-tree and a bayesian approach. In *ICVGIP 2004, Proceedings of the Fourth Indian Conference on Computer Vision, Graphics & Image Processing, Kolkata, India, December 16-18, 2004*, pages 216–221, 2004.
- [93] Stanislaw Matusiak, **Mohamed Daoudi**, Thierry Blu, and Olivier Avaro. Sketch-based images database retrieval. In *Advances in Multimedia Information Systems, 4th International Workshop, MIS'98, Istanbul, Turkey, September 24-26, 1998, Proceedings*, pages 185–191, 1998.
- [94] Meng Meng, Hassen Drira, **Mohamed Daoudi**, and Jacques Boonaert. Human-object interaction recognition by learning the distances between the object and the skeleton joints. In *11th IEEE International Conference and Workshops on Automatic Face and Gesture Recognition, FG 2015, Ljubljana, Slovenia, May 4-8, 2015*, pages 1–6, 2015.
- [95] Meng Meng, Hassen Drira, **Mohamed Daoudi**, and Jacques Boonaert. Detection of abnormal gait from skeleton data. In *Proceedings of the 11th Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications (VISIGRAPP 2016) - Volume 3: VISAPP, Rome, Italy, February 27-29, 2016.*, pages 133–139, 2016.
- [96] Meng Meng, Hassen Drira, **Mohamed Daoudi**, and Jacques Boonaert. Human object interaction recognition using rate-invariant shape analysis of inter joint distances trajectories. In *2016 IEEE Conference on Computer Vision and Pattern Recognition Workshops, CVPR Workshops 2016, Las Vegas, NV, USA, June 26 - July 1, 2016*, pages 999–1004, 2016.
- [97] Abderrahim Mesbah, Aissam Berrahou, Hicham Hammouchi, Hassan Berbia, Hassan Qjidaa, and **Mohamed Daoudi**. Non-rigid 3D model classification using 3D hahn moment convolutional neural networks. In *Eurographics Workshop on 3D Object Retrieval, 3DOR 2018, 16 April 2018, Delft, The Netherlands.*, pages 79–85, 2018.

- [98] A. Mokadem, **Mohamed Daoudi**, and Faouzi Ghorbel. A shape distance by complete and stable invariant descriptors for contour tracking. In *13th International Conference on Pattern Recognition, ICPR 1996, Vienna, Austria, 25-19 August, 1996*, pages 105–109, 1996.
- [99] Mohamad Obeid, Bruno Jedynak, and **Mohamed Daoudi**. Image indexing & retrieval using intermediate features. In *Proceedings of the 9th ACM International Conference on Multimedia 2001, Ottawa, Ontario, Canada, September 30 - October 5, 2001*, pages 531–533, 2001.
- [100] Naima Otberdout, Anis Kacem, **Mohamed Daoudi**, Lahoucine Ballihi, and Stefano Berretti. Deep covariance descriptors for facial expression recognition. In *British Machine Vision Conference 2018, BMVC 2018, Northumbria University, Newcastle, UK, September 3-6, 2018*, page 159, 2018.
- [101] Salwa Said, Boulbaba Ben Amor, Mourad Zaied, Chokri Ben Amar, and **Mohamed Daoudi**. Fast and efficient 3D face recognition using wavelet networks. In *Proceedings of the International Conference on Image Processing, ICIP 2009, 7-10 November 2009, Cairo, Egypt*, pages 4153–4156, 2009.
- [102] Chafik Samir, Anuj Srivastava, and **Mohamed Daoudi**. 3d face recognition using shapes of facial curves. In *2006 IEEE International Conference on Acoustics Speech and Signal Processing, ICASSP 2006, Toulouse, France, May 14-19, 2006*, pages 933–936, 2006.
- [103] Chafik Samir, Anuj Srivastava, **Mohamed Daoudi**, and Sebastian Kurtsek. On analyzing symmetry of objects using elastic deformations. In *VISAPP 2009 - Proceedings of the Fourth International Conference on Computer Vision Theory and Applications, Lisboa, Portugal, February 5-8, 2009 - Volume 1*, pages 194–200, 2009.
- [104] Chafik Samir, **Mohamed Daoudi**, and Anuj Srivastava. Human identification using facial curves with extensions to joint shape-texture analysis. In *VISAPP 2007: Proceedings of the Second International Conference on Computer Vision Theory and Applications, Barcelona, Spain, March 8-11, 2007 - Volume 2*, pages 253–256, 2007.
- [105] Chafik Samir, Jean-Philippe Vandeborre, and **Mohamed Daoudi**. Automatic 3D face recognition using topological techniques. In *Proceedings of the 2005 IEEE International Conference on Multimedia and Expo, ICME 2005, July 6-9, 2005, Amsterdam, The Netherlands*, pages 450–453, 2005.
- [106] Rim Slama, Hazem Wannous, and **Mohamed Daoudi**. 3D human video retrieval: from pose to motion matching. In *Eurographics Workshop on 3D Object Retrieval, Girona, Spain, 2013. Proceedings*, pages 33–40, 2013.
- [107] Rim Slama, Hazem Wannous, and **Mohamed Daoudi**. Extremal human curves: A new human body shape and pose descriptor. In *10th IEEE International Conference and Workshops on Automatic Face and Gesture Recognition, FG 2013, Shanghai, China, 22-26 April, 2013*, pages 1–6, 2013.
- [108] Rim Slama, Hazem Wannous, and **Mohamed Daoudi**. Grassmannian representation of motion depth for 3D human gesture and action recognition. In *22nd International Conference on Pattern Recognition, ICPR 2014, Stockholm, Sweden, August 24-28, 2014*, pages 3499–3504, 2014.

- [109] Wael Ben Soltana, Mohsen Ardabilian, Pierre Lemaire, Di Huang, Przemyslaw Szeptycki, Liming Chen, Nesli Erdogmus, Lionel Daniel, Jean-Luc Dugelay, Boulbaba Ben Amor, Hassen Drira, **Mohamed Daoudi**, and Joseph Colineau. 3D face recognition: A robust multi-matcher approach to data degradations. In *5th IAPR International Conference on Biometrics, ICB 2012, New Delhi, India, March 29 - April 1, 2012*, pages 103–110, 2012.
- [110] Benjamin Szczapa, **Mohamed Daoudi**, Stefano Berretti, Alberto Del Bimbo, Pietro Pala, and Estelle M. Massart. Fitting, comparison, and alignment of trajectories on positive semi-definite matrices with application to action recognition. In *2019 IEEE/CVF International Conference on Computer Vision Workshops, ICCV Workshops 2019, Seoul, Korea (South), October 27-28, 2019*, pages 1241–1250, 2019.
- [111] Benjamin Szczapa, **Mohamed Daoudi**, Stefano Berretti, Pietro Pala, Alberto Del Bimbo, and Zakia Hammal. Automatic estimation of self-reported pain by interpretable representations of motion dynamics. In *Proceedings of 25th International Conference on Pattern Recognition, Milano ITALY, 10 - 15 January 2021*, 2021.
- [112] Benjamin Szczapa, **Mohamed Daoudi**, Anis Kacem, Pierre Guerreschi, Ludwig Gebert, and Juan Carlos Álvarez Paiva. 2d landmark-based facial asymmetry assessment in the clinical case of facial paralysis. In *14th IEEE International Conference on Automatic Face & Gesture Recognition, FG 2019, Lille, France, May 14-18, 2019*, pages 1–5. IEEE, 2019.
- [113] Hedi Tabia, Olivier Colot, **Mohamed Daoudi**, and Jean-Philippe Vandeborre. 3D-shape retrieval using curves and HMM. In *20th International Conference on Pattern Recognition, ICPR 2010, Istanbul, Turkey, 23-26 August 2010*, pages 3147–3150, 2010.
- [114] Hedi Tabia, Olivier Colot, **Mohamed Daoudi**, and Jean-Philippe Vandeborre. Non-rigid 3d shape classification using bag-of-feature techniques. In *Proceedings of the 2011 IEEE International Conference on Multimedia and Expo, ICME 2011, 11-15 July, 2011, Barcelona, Catalonia, Spain*, pages 1–6, 2011.
- [115] Hedi Tabia, **Mohamed Daoudi**, Jean-Philippe Vandeborre, and Olivier Colot. Deformable shape retrieval using bag-of-feature techniques. In *Three-Dimensional Imaging, Interaction, and Measurement, San Francisco Airport, California, USA, January 24-27, 2011*, page 78640P, 2011.
- [116] Frank B. ter Haar, **Mohamed Daoudi**, and Remco C. Veltkamp. Shape retrieval contest 2008: 3D face scans. In *2008 International Conference on Shape Modeling and Applications (SMI 2008), June 4-6, 2008, Stony Brook, NY, USA*, pages 225–226, 2008.
- [117] **Mohamed Daoudi**, Tarik Filali Ansary, Julien Tierny, and Jean-Philippe Vandeborre. 3D-mesh models: View-based indexing and structural analysis. In *Digital Libraries: Research and Development, First International DELOS Conference, Pisa, Italy, February 13-14, 2007, Revised Selected Papers*, pages 298–307, 2007.
- [118] **Mohamed Daoudi**, Lahoucine Ballihi, Chafik Samir, and Anuj Srivastava. Three-dimensional face recognition using elastic deformations of facial surfaces. In *Proceedings of the 2008 IEEE International Conference on Multimedia and Expo, ICME 2008, June 23-26 2008, Hannover, Germany*, pages 97–100, 2008.

- [119] **Mohamed Daoudi**, Stefano Berretti, Pietro Pala, Yvonne Delevoye-Turrell, and Alberto Del Bimbo. Emotion recognition by body movement representation on the manifold of symmetric positive definite matrices. In *Image Analysis and Processing - ICIAP 2017 - 19th International Conference, Catania, Italy, September 11-15, 2017, Proceedings, Part I*, pages 550–560, 2017.
- [120] **Mohamed Daoudi**, Hassen Drira, Boulbaba Ben Amor, and Stefano Berretti. A dynamic geometry-based approach for 4d facial expressions recognition. In *European Workshop on Visual Information Processing, EUVIP 2013, Paris, France, June 10-12, 2013*, pages 280–284, 2013.
- [121] **Mohamed Daoudi** and Stanislaw Matusiak. New multiscale planar shape invariant representation under a general affine transformations. In *15th International Conference on Pattern Recognition, ICPR’00, Barcelona, Spain, September 3-8, 2000.*, pages 3794–3797, 2000.
- [122] **Mohamed Daoudi**, Tobias Schreck, Michela Spagnuolo, Ioannis Pratikakis, Remco C. Veltkamp, and Theoharis Theoharis, editors. *Eurographics Workshop on 3D Object Retrieval, Norrköping, Sweden, May 2, 2010, Proceedings*. Eurographics Association, 2010.
- [123] Yann **Mohamed Daoudi** and Coello, Paul Audain Desrosiers, and Laurent ott. A New Computational Approach to Identify Human Social intention in Action. In *IEEE International Conference on Automatic Face and Gesture Recognition (FG 2018)*, Xi’an, China, May 2018.
- [124] Adrien Theetten, Jean-Philippe Vandeborre, and **Mohamed Daoudi**. Determining characteristic views of a 3D object by visual hulls and hausdorff distance. In *Fifth International Conference on 3D Digital Imaging and Modeling (3DIM 2005), 13-16 June 2005, Ottawa, Ontario, Canada*, pages 439–446, 2005.
- [125] Julien Tierny, Jean-Philippe Vandeborre, and **Mohamed Daoudi**. Invariant high level reeb graphs of 3D polygonal meshes. In *3rd International Symposium on 3D Data Processing, Visualization and Transmission (3DPVT 2006), 14-16 June 2006, Chapel Hill, North Carolina, USA*, pages 105–112, 2006.
- [126] Julien Tierny, Jean-Philippe Vandeborre, and **Mohamed Daoudi**. Reeb chart unfolding based 3D shape signatures. In *Eurographics 2007 - Short Papers, Prague, Czech Republic, September 3-7, 2007*, pages 13–16, 2007.
- [127] Julien Tierny, Jean-Philippe Vandeborre, and **Mohamed Daoudi**. Topology driven 3D mesh hierarchical segmentation. In *2007 International Conference on Shape Modeling and Applications (SMI 2007), 13-15 June 2007, Lyon, France*, pages 215–220, 2007.
- [128] Julien Tierny, Jean-Philippe Vandeborre, and **Mohamed Daoudi**. Fast and precise kinematic skeleton extraction of 3D dynamic meshes. In *19th International Conference on Pattern Recognition (ICPR 2008), December 8-11, 2008, Tampa, Florida, USA*, pages 1–4, 2008.
- [129] Jean-Philippe Vandeborre, Vincent Couillet, and **Mohamed Daoudi**. A practical approach for 3D model indexing by combining local and global invariants. In *1st*

*International Symposium on 3D Data Processing Visualization and Transmission (3DPVT 2002)*, 19-21 June 2002, Padova, Italy, pages 644–647, 2002.

- [130] György G. Vass, **Mohamed Daoudi**, and Faouzi Ghorbel. Optimization methods in multilayer classifier networks for automatic control of lamellibranch larva growth. In *Image Analysis and Processing, 9th International Conference, ICIAP '97, Florence, Italy, September 17-19, 1997, Proceedings, Volume II*, pages 220–227, 1997.
- [131] Remco C. Veltkamp, Stefan van Jole, Hassen Drira, Boulbaba Ben Amor, **Mohamed Daoudi**, Huibin Li, Liming Chen, Peter Claes, Dirk Smeets, Jeroen Hermans, Dirk Vandermeulen, and Paul Suetens. SHREC '11 track: 3D face models retrieval. In *Eurographics Workshop on 3D Object Retrieval 2011, Llandudno, UK, April 10, 2011. Proceedings*, pages 89–95, 2011.
- [132] Hazem Wannous, Vladislavs Dovgalecs, Rémi Mégret, and **Mohamed Daoudi**. Place recognition via 3D modeling for personal activity lifelog using wearable camera. In *Advances in Multimedia Modeling - 18th International Conference, MMM 2012, Klagenfurt, Austria, January 4-6, 2012. Proceedings*, pages 244–254, 2012.
- [133] Baiqiang Xia, Boulbaba Ben Amor, Hassen Drira, **Mohamed Daoudi**, and Lahoucine Ballihi. Gender and 3D facial symmetry: What's the relationship? In *10th IEEE International Conference and Workshops on Automatic Face and Gesture Recognition, FG 2013, Shanghai, China, 22-26 April, 2013*, pages 1–6, 2013.
- [134] Baiqiang Xia, Boulbaba Ben Amor, Di Huang, **Mohamed Daoudi**, Yunhong Wang, and Hassen Drira. Enhancing gender classification by combining 3D and 2d face modalities. In *21st European Signal Processing Conference, EUSIPCO 2013, Marrakech, Morocco, September 9-13, 2013*, pages 1–5, 2013.
- [135] Baiqiang Xia, Boulbaba Ben Amor, and **Mohamed Daoudi**. Age estimation using 3D shape of the face. In *Computer Vision, Imaging and Computer Graphics - Theory and Applications - International Joint Conference, VISIGRAPP 2014, Lisbon, Portugal, January 5-8, 2014, Revised Selected Papers*, pages 175–190, 2014.
- [136] Baiqiang Xia, Boulbaba Ben Amor, and **Mohamed Daoudi**. Exploring the magnitude of human sexual dimorphism in 3D face gender classification. In *Computer Vision - ECCV 2014 Workshops - Zurich, Switzerland, September 6-7 and 12, 2014, Proceedings, Part II*, pages 697–710, 2014.
- [137] Baiqiang Xia, Boulbaba Ben Amor, **Mohamed Daoudi**, and Hassen Drira. Can 3D shape of the face reveal your age? In *VISAPP 2014 - Proceedings of the 9th International Conference on Computer Vision Theory and Applications, Volume 2, Lisbon, Portugal, 5-8 January, 2014*, pages 5–13, 2014.
- [138] Qingkai Zhen, Di Huang, Yunhong Wang, Hassen Drira, Boulbaba Ben Amor, and **Mohamed Daoudi**. Magnifying subtle facial motions for 4d expression recognition. In *23rd International Conference on Pattern Recognition, ICPR 2016, Cancún, Mexico, December 4-8, 2016*, pages 2252–2257, 2016.
- [139] Huicheng Zheng, Hongmei Liu, and **Mohamed Daoudi**. Blocking objectionable images: adult images and harmful symbols. In *Proceedings of the 2004 IEEE International*



*Conference on Multimedia and Expo, ICME 2004, 27-30 June 2004, Taipei, Taiwan*, pages 1223–1226, 2004.

- [140] Huicheng Zheng, **Mohamed Daoudi**, and Bruno Jedynak. From maximum entropy to belief propagation: An application to skin detection. In *British Machine Vision Conference, BMVC 2004, Kingston, UK, September 7-9, 2004. Proceedings*, pages 1–10, 2004.

## BOOKS

- [141] Jean-Luc Dugelay, Atila Baskurt, and **Mohamed Daoudi**, editors. *3D Object processing: Indexing, Compression and Watermarking*. John Wiley & Sons Inc., April 2008. 198 pages.
- [142] **M. Daoudi**, T. Schreck, M. Spagnuolo, I. Pratikakis, R. Veltkamp, and T. Theoharis, editors. *3D Object Retrieval*. Eurographics/ACM SIGGRAPH Symposium Proceedings, May 2010. 127 pages.
- [143] **Mohamed Daoudi**, Anuj Srivastava, and Remco Veltkamp. *3D Face Modeling, Analysis and Recognition*. Wiley Publishing, 1st edition, 2013.

## BOOK CHAPTERS IN EDITED VOLUMES

- [144] Boulbaba Ben Amor **Mohamed Daoudi** Anuj Srivastava Alberto del Bimbo Hassen Drira, Stefano Berretti and Pietro Pala. 3D face surface analysis and recognition based on facial curves. In Mohamed Daoudi, Anuj Srivastava, and Remco Veltkamp, editors, *3D Face Modeling, Analysis and Recognition*, pages 77–117. Wiley Publishing, 2013.
- [145] Hassen Drira **Mohamed Daoudi** Anuj Srivastava Alberto Del Bimbo Stefano Berretti, Boulbaba Ben Amor and Pietro Pala. Applications. In Mohamed Daoudi, Anuj Srivastava, and Remco Veltkamp, editors, *3D Face Modeling, Analysis and Recognition*, pages 149–198. Wiley Publishing, 2013.
- [146] **Mohamed Daoudi**, Anis Kacem, and Juan-Carlos Alvarez Paiva. The Riemannian and affine geometry of facial expression and action recognition. In Andreas Weinmann Philipp Grohs, Martin Holler, editor, *Handbook of Variational Methods for Nonlinear Geometric Data*. Springer, 2020.
- [147] Jean-Philippe Vandeborre, Hedi Tabia, and **Mohamed Daoudi**. Chapitre 18 - Reconnaissance et indexation 3D. In Laurent Lucas, Céline Loscos, and Yannick Remion, editors, *Vidéo 3D - capture, traitement et diffusion*, Traité IC2 - Signal et Image, pages 317–336. Hermes-Lavoisier, August 2013.