

# Publications (2010- 2014)

## de l'équipe

### Systemes de Transports Intelligents du LITIS

#### Reuves Internationales (2010-2014)

- [1] Malek Ben Salem, Emna Bouazizi, Rafik Bouaziz, and Claude Duvallet. Quality of service management in distributed feedback control scheduling architecture using different replication policies. *International Journal of Computer Science and Information Technology*, 6 :75–87, February 2014.
- [2] Dieu Sang Ly, Cédric Demonceaux, Pascal Vasseur, and Claude Pégard. Extrinsic calibration of heterogeneous cameras by line images. *Machine Vision and Applications*, 25(6) :1601–1614, 2014.
- [3] Alina Miron, Samia Ainouz, Alexandrina Rogozan, and Abdelaziz Benschair. A robust cost function for stereo matching of road scenes. *Pattern Recognition Letters*, 38(0) :70 – 77, 2014.
- [4] Samia Ainouz, Olivier Morel, David Fofi, Saleh Mosaddegh, and Abdelaziz Benschair. Adaptive processing of catadioptric images using polarization imaging : towards a polar-catadioptric model. *Optical Engineering*, 52(3) :037001–037001, 2013.
- [5] Anca Apatean, Alexandrina Rogozan, and Abdelaziz Benschair. Visible-infrared fusion schemes for road obstacle classification. *Transportation Research Part C : Emerging Technologies*, 35(0) :180 – 192, 2013.
- [6] J. C. Bazin, Hongdong Li, In So Kweon, C. Demonceaux, P. Vasseur, and K. Ikeuchi. A branch-and-bound approach to correspondence and grouping problems. *Pattern Analysis and Machine Intelligence, IEEE Transactions on*, 35(7) :1565–1576, 2013.
- [7] G. Del Mondo, M.A. Rodriguez, C. Claramunt, L. Bravo, and R. Thibaud. Modeling consistency of spatio-temporal graphs. *Data & Knowledge Engineering*, 84(0) :59 – 80, 2013.
- [8] Y. Dupuis, X. Savatier, and P. Vasseur. Feature subset selection applied to model-free gait recognition. *Image and Vision Computing*, 31(8) :580 – 591, 2013.
- [9] Y. Dupuis, X. Savatier, J.-Y. Ertaud, and P. Vasseur. Robust radial face detection for omnidirectional vision. *Image Processing, IEEE Transactions on*, 22(5) :1808–1821, 2013.
- [10] A. Hadachi, S. Mousset, and A. Benschair. Approach to estimate travel time using sparsely sampled gps data in urban networks. *Electronics Letters*, 49(15) :957–958, 2013.
- [11] Wassim Jaziri and Michel Mainguenaud. A framework to model and manipulate constraints for over-constrained geographic applications. *Geoinformatica*, 17(2) :257– 284, 2013.
- [12] Ashutosh Natraj, DieuSang Ly, Damien Eynard, Cédric Demonceaux, and Pascal Vasseur. Omnidirectional vision for uav : Applications to attitude, motion and altitude estimation for day and night conditions. *Journal of Intelligent & Robotic Systems*, 69(1-4) :459–473, 2013.
- [13] N. Salameh, G. Challita, S. Mousset, A. Benschair, and S. Ramaswamy. Collaborative positioning and embedded multi-sensors fusion cooperation in advanced driver assistance system. *Transportation Research Part C : Emerging Technologies*, 29(0) :197 – 213, 2013.
- [14] D. Vivet, Y. Prabhakar, P. Subirats, C. Lecomte, E. Violette, and A. Benschair. Laser-scanner-based powered two-wheeler traffic monitoring. *Electronics Letters*, 49(25) :1620–1622, 2013.
- [15] J. C. Bazin, Cédric Demonceaux, Pascal Vasseur, and In So Kweon. Rotation estimation and vanishing point extraction by omnidirectional vision in urban environment. *The International Journal of Robotics Research*, 31(1) :63–81, 2012.
- [16] Laura Dioşan, Alexandrina Rogozan, and Jean-Pierre Pecuchet. Improving classification performance of support vector machine by genetically optimising kernel shape and hyperparameters. *Applied Intelligence*, 36(2) :280–294, 2012.
- [17] Damien Eynard, Pascal Vasseur, Cédric Demonceaux, and Vincent Frémont. Real time uav altitude, attitude and motion estimation from hybrid stereovision. *Autonomous Robots*, 33(1-2) :

157–172, 2012.

- [18] A. Miron, S. Ainouz, A. Rogozan, and A. Bensrhair. Cross-comparison census for colour stereo matching applied to intelligent vehicle. *Electronics Letters*, 48(24) :1530–1532, 2012.
- [19] S. Mosaddegh, D. Fofi, and P. Vasseur. Short baseline line matching for central imaging systems. *Pattern Recognition Letters*, 33(16) :2292 – 2301, 2012.
- [20] Saleh Mosaddegh, David Fofi, and Pascal Vasseur. Two view line-based motion and structure estimation for planar scenes. *Electronic Letters on Computer Vision and Image Analysis*, 11(1), 2012.
- [21] Bechir Alaya, Claude Duvallet, Bruno Sadeg, and Faiez Gargouri. A dynamic- management of qos in distributed multimedia systems. *International Journal of Computing, (IJC)*, 3, avril 2011.
- [22] Cédric Demonceaux, Pascal Vasseur, and Yohan Fougerolle. Central catadioptric image processing with geodesic metric. *Image and Vision Computing*, 29(12) :840 – 849, 2011.
- [23] Mourad Kaddes, Laurent Amanton, Bruno Sadeg, Mouez Ali, Majed Abdouli, and Rafik Bouaziz. Rt-etm : Toward analysis and formalizing transaction and data models in realtime databases. *IJWA*, 3(2) :72–79, 2011.
- [24] J. C. Bazin, C. Demonceaux, P. Vasseur, and I. S. Kweon. Motion estimation by decoupling rotation and translation in catadioptric vision. *Computer Vision and Image Understanding*, 114(2) :254–273, February 2010.
- [25] Laura Diosan, Alexandrina Rogozan, and Jean-Pierre Pécuchet. Learning svm with complex multiple kernels evolved by genetic programming. *International Journal on Artificial Intelligence Tools*, 19(5) :647–677, 2010.
- [26] Mohamed El Ansari, Stéphane Mousset, and Abdelaziz Bensrhair. Temporal consistent real-time stereo for intelligent vehicles. *Pattern Recognition Letters*, 31(11) :1226 – 1238, 2010.
- [27] J. Klein, C. Lecomte, and P. Miché. Hierarchical and conditional combination of belief functions induced by visual tracking. *International Journal of Approximate Reasoning*, 51(4) :410–428, 2010.
- [28] Saoussen Rekhis, Nadia Bouassida, Rafik Bouaziz, Claude Duvallet, and Bruno Sadeg. Modeling real time applications with reusable design patterns. *International Journal of Advanced Science and Technology (IJAST)*, 22 :71–86, September 2010.

## Revue nationale (2010-2014)

- [1] Y. Dupuis, X. Savatier, J.Y. Ertaud, and P. Vasseur. Détection radiale de visages sur images omnidirectionnelles. *Traitement du Signal*, 31(1-2) :143–173, 2014.
- [2] N. Souissi and M. Mainguenaud. Modèle pour un serveur de données géographiques. application : Services web géographiques wms et wfs. *Revue Internationale de Géomatique*, 23 : 255–285, 2013.
- [3] N. Salameh, S. Mousset, and A. Bensrhair. Conception d’un système d’alerte coopératif basé sur les adas communicants. *Recherche Transport Sécurité*, 29(113), 2013.

## Conférences internationales de Rang A (2010- 2014)

- [1] Malek Ben Salem, Emna Bouazizi, Rafik Bouaziz, and Claude Duvallet. Quality of service management in distributed feedback control scheduling architecture using different replication policies. In *Proceedings of International Conference on Foundations of Computer Science and Technology (CST)*, 2014.
- [2] Rawia Mhiri, Pascal Vasseur, Stéphane Mousset, Rémi Boutteau, and Abdelaziz Bensrhair. Visual odometry with unsynchronized multi-cameras setup for intelligent vehicle application. In *2014 IEEE Intelligent Vehicles Symposium Proceedings*, Dearborn, MI, USA, June 8-11, 2014, pages 1339–1344, 2014.
- [3] Yohan Dupuis, Pierre Merriaux, P. Subirats, Rémi Boutteau, Xavier Savatier, and Pascal Vasseur. Gps-based preliminary map estimation for autonomous vehicle mission preparation. In *2014 IEEE/RSJ International Conference on Intelligent Robots and Systems*, Chicago, IL, USA, September 14-18, 2014, pages 4241–4246, 2014.
- [4] Pierre Merriaux, Rémi Boutteau, Pascal Vasseur, and Xavier Savatier. IMU/LIDAR based positioning of a gangway for maintenance operations on wind farms. In *2014 IEEE/RSJ International Conference on Intelligent Robots and Systems*, Chicago, IL, USA, September 14-18, 2014, pages 4213–4219, 2014.
- [5] Yunsu Bok, Dong-Geol Choi, Pascal Vasseur, and In-So Kweon. Extrinsic calibration of non-overlapping camera-laser system using structured environment. In *2014 IEEE/RSJ International Conference on Intelligent Robots and Systems*, Chicago, IL, USA, September 14-18, 2014, pages 436–443, 2014.
- [6] Danda Pani Paudel, Cédric Demonceaux, Adlane Habed, Pascal Vasseur, and In-So Kweon. 2d-3d camera fusion for visual odometry in outdoor environments. In *2014 IEEE/RSJ*

- International Conference on Intelligent Robots and Systems, Chicago, IL, USA, September 14-18, 2014, pages 157–162, 2014.
- [7] Samia Ainouz Fan Wang, Alina Miron and Abdelaziz Bensrhair. Post-aggregation stereo matching method using dempster-shafer theory. In IEEE International Conference on Image Processing, pages 465–468, 2014.
  - [8] Yohan Dupuis, Arturo Mendoza Quispe, Pascal Vasseur, Benjamin Castaneda, and Nicolas Ragot. Enhanced omnidirectional image unwrapping for face detection. In IEEE International Conference on Image Processing, 2014.
  - [9] Danda Pani Paudel, Cédric Demonceaux, Adlane Habed, and Pascal Vasseur. Localization of 2d cameras in a known environment using direct 2d-3d registration. In 2014 International Conference on Pattern Recognition, Stockholm, August 2014, 2014.
  - [10] Olivier Saurer, Pascal Vasseur, Cédric Demonceaux, and Friedrich Fraundorfer. A homography formulation to the 3pt plus a common direction relative pose problem. In Asian Conference on Computer Vision (ACCV), Singapore, November 2014, 2014.
  - [11] Y. Dupuis, P. Subirats, and P. Vasseur. Robust image segmentation for overhead real time motorbike counting. In Intelligent Transportation Systems (ITSC), 2014 IEEE 17th International Conference on, pages 3070–3075, Oct 2014.
  - [12] P. Merriaux, Y. Dupuis, P. Vasseur, and X. Savatier. Wheel odometry-based car localization and tracking on vectorial map. In Intelligent Transportation Systems (ITSC), 2014 IEEE 17th International Conference on, pages 1890–1891, Oct 2014.
  - [13] Y. Prabhakar, P. Subirats, C. Lecomte, E. Violette, and A. Bensrhair. A lidar-based method for the detection and counting of powered two wheelers. In Intelligent Vehicles Symposium (IV), 2013 IEEE, pages 1167–1172, June 2013.
  - [14] A. Miron, R.I. Fetriga, A. Bensrhair, and A. Broggi. Swir images evaluation for pedestrian detection in clear visibility conditions. In IEEE International Transportation Systems Conference (ITSC), pages 354–359, The Hague, The Netherlands, October 2013.
  - [15] J.-C. Bazin, S. Yongduek, C. Demonceaux, P. Vasseur, K. Ikeuchi, Inso Kweon, and M. Pollefeys. Globally optimal line clustering and vanishing point estimation in manhattan world. In Computer Vision and Pattern Recognition (CVPR), 2012 IEEE Conference on, pages 638–645, 2012.
  - [16] A. Natraj, P. Sturm, C. Demonceaux, and P. Vasseur. A geometrical approach for vision based attitude and altitude estimation for uavs in dark environments. In Intelligent Robots and Systems (IROS), 2012 IEEE/RSJ International Conference on, pages 4565–4570, 2012.
  - [17] Alina Miron, Samia Ainouz, Alexandrina Rogozan, and Abdelaziz Bensrhair. Towards a robust and fast color stereo matching for intelligent vehicle application. In ICIP, pages 465–468. IEEE, 2012.
  - [18] Alina Miron, Bassem Besbes, Alexandrina Rogozan, Samia Ainouz, and Abdelaziz Bensrhair. Intensity self similarity features for pedestrian detection in far-infrared images. In Intelligent Vehicles Symposium, pages 1120–1125. IEEE, 2012.
  - [19] Amnir Hadachi, Stéphane Mousset, and Abdelaziz Bensrhair. Practical testing application of travel time estimation using applied monte carlo method and adaptive estimation from probes. In IEEE Intelligent Vehicles Symposium 2012, Alcalá de Henares, Spain, June 3-7 2012.
  - [20] S.Krammand A. Bensrhair. Obstacle detection using sparse stereo vision and clustering techniques. In Intelligent Vehicles Symposium (IV), 2012 IEEE, pages 760–765, June 2012.
  - [21] Ashutosh Natraj, Cedric Demonceaux, P. Vasseur, and P. Sturm. Vision based attitude and altitude estimation for uavs in dark environments. In Intelligent Robots and Systems (IROS), 2011 IEEE/RSJ International Conference on, pages 4006–4011, 2011.
  - [22] Y. Dupuis, X. Savatier, J. Ertaud, and P. Vasseur. A new approach for face detection with omnidirectional sensors. In Robotics and Biomimetics (ROBIO), 2011 IEEE International Conference on, pages 1855–1860, 2011.
  - [23] Damien Eynard, Cédric Demonceaux, Pascal Vasseur, and Vincent Frémont. Uav motion estimation using hybrid stereoscopic vision. In Proceedings of the IAPR Conference on Machine Vision Applications (IAPR MVA 2011), Nara Centennial Hall, Nara, Japan, June 13-15, 2011, pages 340–343, 2011.
  - [24] Sang Ly, Cédric Demonceaux, Pascal Vasseur, and Claude Pégard. Motion estimation for hybrid cameras using point and line feature fusion. In Proceedings of the IAPR Conference on Machine Vision Applications (IAPR MVA 2011), Nara Centennial Hall, Nara, Japan, June 13-15, 2011, pages 43–46, 2011.
  - [25] Saleh Mosaddegh, David Fofi, and Pascal Vasseur. Line based motion estimation and reconstruction of piece-wise planar scenes. In IEEE Workshop on Applications of Computer Vision (WACV 2011), 5-7 January 2011, Kona, HI, USA, pages 658–663, 2011.
  - [26] Saleh Mosaddegh, David Fofi, and Pascal Vasseur. Line segment based structure and motion from two views - a practical issue. In VISAPP 2011 - Proceedings of the Sixth International

- Conference on Computer Vision Theory and Applications, Vilamoura, Algarve, Portugal, 5-7 March, 2011, pages 680–684, 2011.
- [27] B. Besbes, S. Ammar, Y. Kessentini, A. Rogozan, and A. Bensrhair. Evidential combination of svm road obstacle classifiers in visible and far infrared images. In IEEE Intelligent Vehicles Symposium, pages 1074–1079. IEEE, 2011.
- [28] Amnir Hadachi, Christèle Lecomte, Stéphane Mousset, and Abdelaziz Bensrhair. An application of the sequential monte carlo to increase the accuracy of travel time estimation in urban areas. In IEEEComSoc IEEE ITSS, editor, International IEEE Conference on Intelligent Transportation System, volume 1, pages 157–162. IEEE, October 5-7, 2011 2011.
- [29] J.-C. Bazin, P. Laffont, In So Kweon, C. Demonceaux, and P. Vasseur. An original approach for automatic plane extraction by omnidirectional vision. In Intelligent Robots and Systems (IROS), 2010 IEEE/RSJ International Conference on, pages 752–758, 2010.
- [30] D. Eynard, P. Vasseur, C. Demonceaux, and V. Fremont. Uav altitude estimation by mixed stereoscopic vision. In Intelligent Robots and Systems (IROS), 2010 IEEE/RSJ International Conference on, pages 646–651, 2010.
- [31] Sang Ly, Cedric Demonceaux, and Pascal Vasseur. Multi-camera topology recovery using lines. In VISAPP 2011 - Proceedings of the Sixth International Conference on Computer Vision Theory and Applications, Vilamoura, Algarve, Portugal, 5-7 March, 2011, pages 245–250, 2010.
- [32] Sang Ly, Cedric Demonceaux, and P. Vasseur. Translation estimation for single view-point cameras using lines. In Robotics and Automation (ICRA), 2010 IEEE International Conference on, pages 1928–1933, 2010.
- [33] P. Vasseur and C. Demonceaux. Central catadioptric line matching for robotic applications. In Robotics and Automation (ICRA), 2010 IEEE International Conference on, pages 2562–2567, 2010.
- [34] Bassem Besbes, Anca Apatean, Alexandrina Rogozan, and Abdelaziz Bensrhair. Local and global features for road obstacle recognition in far infrared images. In IEEE Conference on Intelligent Transportation Systems, pages 1869–1874. IEEE, 2010.
- [35] Bassem Besbes, Alexandrina Rogozan, and Abdelaziz Bensrhair. Pedestrian recognition based on hierarchical codebook of surf features in visible and infrared images. In IEEE Intelligent Vehicles Symposium, pages 156–161. IEEE, 2010.
- [36] Mohamed El Ansari, Stéphane Mousset, Abdelaziz Bensrhair, and George Bebis. Temporal consistent fast stereo matching for advanced driver assistance system (adas). In IEEE Intelligent Vehicles Symposium 2010, number 7, pages 825–831, San Diego, Californie, USA, 21-24 June, 2010 2010. IEEE.
- [37] Hela Marouane, Saoussen Rekhis, Rafik Bouaziz, Claude Duvallet, and Bruno Sadeg. Definition and reuse of analysis patterns for real-time applications. In Proceedings of the International Conferences on Pervasive Patterns and Applications (Patterns'2010), pages 84–91, November 2010.

## Autres conférences internationales (2010- 2014)

- [1] Unghui Lee, Sangyol Yoon, HyunChul Shim, P. Vasseur, and C. Demonceaux. Local path planning in a complex environment for self-driving car. In Cyber Technology in Automation, Control, and Intelligent Systems (CYBER), 2014 IEEE 4th Annual International Conference on, pages 445–450, June 2014.
- [2] Malek Ben Salem, Fehima Achour, Emna Bouazizi, Rafik Bouaziz, and Claude Duvallet. Applicability of the (m, k)-firm approach for the qos enhancement in distributed rtdbms. In ICA3PP (1), number 8285 in LNCS, pages 166–175, 2013.
- [3] Slaheddine Chelbi, Claude Duvallet, Majed Abdouli, and Rafik Bouaziz. Multi-hop energy efficient routing protocol based on data controlling for wireless sensor networks. In Proceedings of the 10th ACS/IEEE International Conference on Computer Systems and Applications (AICCSA'2013), 2013.
- [4] M. Kaddes, L. Amanton, B. Sadeg, A. Berred, and M. Abdouli. Enhancement of generalized earliest deadline first policy. In Proceedings of 15th International Conference on Enterprise Information Systems (ICEIS), volume 1, pages 183–190, 2013.
- [5] M. Kaddes, L. Amanton, B. Sadeg, A. Berred, M. Abdouli, and R. Bouaziz. A probabilistic analysis of transactions success ratio in real-time databases. In Proceedings of 27th European Simulation and Modelling Conference (ESM), pages 46–53, Lancaster University, Lancaster, UK, 2013.
- [6] Hela Marouane, Achraf Makni, Claude Duvallet, Bruno Sadeg, and Rafik Bouaziz. A real-time design pattern for actuators in advanced driver assistance systems. In Proceedings of The Eighth International Conference on Software Engineering Advances (ICSEA), pages 152–161, 2013.
- [7] Saoussen Rekhis, Hela Marouane, Rafik Bouaziz, Claude Duvallet, and Bruno Sadeg. Metrics

- for measuring quality of real-time design patterns. In Proceedings of The Eighth International Conference on Software Engineering Advances (ICSEA), pages 162–168, 2013.
- [8] Nada Louati, Rafik Bouaziz, Claude Duvallet, and Bruno Sadeg. Managing data freshness with marte in real-time databases. In Proceedings of 16th IEEE Computer Society Symposium on Object/component/Service-Oriented Real-Time Distributed Computing (ISORC'2013), June 2013.
- [9] N. Alioua, A. Amine, M. Rziza, A. Bensrhair, and D. Aboutadjine. Head pose estimation based on steerable filters and likelihood parametrized function. In 21st European Signal Processing Conference (EUSIPCO), Marrakech, Morocco, September 2013.
- [10] P. Yver, S. Kramm, A. Bensrhair, and E. Azzam. Global colour calibration for stereo images using polynomial fitting. In 10th European Conference on Visual Media Production, London, November 2013.
- [11] Amnir Hadachi, Stéphane Mousset, Christèle Lecomte, and Abdelaziz Bensrhair. Travel time estimation using cooperative probes vehicles. In ISIVC 2012, International Symposium on signal, Image, Video and Communication, pages 224–227, 2012.
- [12] Nada Louati, Rafik Bouaziz, Claude Duvallet, and Bruno Sadeg. A uml/marte profile for real-time databases. In Proceedings of 11th IEEE/ACIS International Conference on Computer and Information Science (ICIS'2012), pages 663–668, 2012.
- [13] Nada Louati, Rafik Bouaziz, Claude Duvallet, and Bruno Sadeg. Modeling structural, temporal and behavioral features of a real-time database. In Proceedings of the 14th International Conference on Enterprise Information Systems (ICEIS), pages 119–125, 2012.
- [14] Hela Marouane, Achraf Makni, Rafik Bouaziz, Claude Duvallet, and Bruno Sadeg. A real-time design pattern for advanced driver assistance systems. In Proceedings of the 17th Conference on Pattern Languages of Programs (EuroPLoP'2012), 2012.
- [15] Ajay Mittal, Sanjeev Sofat, Edwin Hancock, and Stéphane Mousset. A statistical operator for detecting weak edges in low contrast images. In Image Analysis and Recognition, volume 7324 of Lecture Notes in Computer Science, pages 89–96. Springer Berlin Heidelberg, 2012.
- [16] Ines Hadj Mtiir, Khaled Kaaniche, Pascal Vasseur, and Mohamed Chtourou. False positive outliers rejection for improving image registration accuracy - application to road traffic aerial sequences. In Jean-Louis Ferrier, Alain Bernard, Oleg Yu. Gusikhin, and Kurosh Madani, editors, ICINCO, pages 274–279. SciTePress, 2012.
- [17] I.H. Mtiir, K. Kaaniche, M. Chtourou, and P. Vasseur. Aerial sequence registration for vehicle detection. In Systems, Signals and Devices (SSD), 2012 9th International Multi-Conference on, pages 1–6, 2012.
- [18] Nadeen Salameh, Stéphane Mousset, and Abdelaziz Bensrhair. Collaborative framework in communicating advanced driver assistance system. In ISIVC 2012, International Symposium on signal, Image, Video and Communication, pages 220–223, 2012.
- [19] Alina Miron, Samia Ainouz, Alexandrina Rogozan, Horia Pop, and Abdelaziz Bensrhair. Stereo matching using radiometric invariant measures. In Knowledge Engineering : Principles and Techniques Conference, pages 369–378. Militon FRENTIU Horia F. POP Simona MOTOGNA, 2011.
- [20] Y. Dupuis, X. Savatier, J. Ertaud, and P. Vasseur. A direct approach for face detection on omnidirectional images. In Robotic and Sensors Environments (ROSE), 2011 IEEE International Symposium on, pages 243–248, 2011.
- [21] M. Kaddes, M. Abdouli, L. Amanton, M. Ali, R. Bouaziz, and B. Sadeg. Rt-etm : Toward analysis and formalizing transaction and data models in real-time databases. In MEDI, LNCS 6918, pages 85–96, 2011.
- [22] F. Yonga, C. Bobda, J. Anders, and A. Bensrhair. Adaptive video streaming. In IASTED International Conference Signal and Image Processing (SIP), 2011.
- [23] A.A. Zarezadeh, F. Muhlbauer, C. Bobda, M. Mefenza, and A. Bensrhair. Reliable and reconfigurable hardware platform for smart cameras. In IASTED International Conference Signal and Image Processing (SIP), 2011.
- [24] Nadeen Salameh, Stéphane Mousset, and Abdelaziz Bensrhair. Evaluating new prototyping framework based on combining embedded sensors data and ns2 simulations. In 11th International Conference on ITS Telecommunications (ITS-T 2011), number 7, pages 571–577. IEEE, IEEE catalog number : CFP1128A-CDR, 23-25 August 2011.
- [25] Nada Louati, Rafik Bouaziz, Claude Duvallet, and Bruno Sadeg. Design, modeling and implementation of a real-time object model for real-time databases. In Informatics and Computational Intelligence (ICI), 2011 First International Conference on, pages 227–232, December 2011.
- [26] Nada Louati, Rafik Bouaziz, Claude Duvallet, and Bruno Sadeg. Rto-rtodb : A real-time object-oriented database model. In International Conference on Parallel and Distributed Computing and Systems (PDCS 2011), page 9 pages, December 2011.
- [27] Bechir Alaya, Claude Duvallet, and Bruno Sadeg. Feedback architecture for multi-media

- systems. In ACS/IEEE International Conference on Computer Systems and Applications, Hammamet, Tunisia, 2010.
- [28] Saleh Mosaddegh, David Fofi, and Pascal Vasseur. Ego-translation estimation from one straight edge in constructed scenes. In Proc. SPIE Image Processing : Machine Vision Applications III, volume 7538, 2010.
- [29] S. Mosaddegh, D. Fofi, and P. Vasseur. Motion estimation and reconstruction of piecewise planar scenes from two views. In Image and Vision Computing New Zealand (IVCNZ), 2010 25th International Conference of, pages 1–7, 2010.
- [30] J. Pelcat, S. Kramm, A. Bensrhair, and F. Sella. Research and development of stereo vision techniques within an industrial environment. In European Workshop on Visual Information Processing (EUVIP), 2010.
- [31] Saoussen Rekhis, Nadia Bouassida, Claude Duvallet, Rafik Bouaziz, and Bruno Sadeg. A process to derive domain-specific patterns : Application to the real time domain. In Proceedings of the 14th East European Conference on Advances in Databases and Information Systems, ADBIS'10, pages 475–489, Berlin, Heidelberg, 2010. Springer- Verlag.
- [32] B. Besbes, B. Labbé, A. Rogozan, and A. Bensrhair. Svm-based fast pedestrian recognition using a hierarchical codebook of local features. In IEEE International Workshop on Machine Learning for Signal Processing, pages 226–231. IEEE, 2010.
- [33] Ravi Garg, Stéphane Mousset, Rajendra Sahu, and Abdelaziz Bensrhair. Obstacle detection for vehicle navigation by chaining of adaptive declivities using geometrical constraints. In IACSIT, editor, ICDIP 2010, The 2nd International Conference on Digital Image Processing, volume CD-ROM, Singapore, February 2010.
- [34] Nadeen Salameh, Stéphane Mousset, and Abdelaziz Bensrhair. A new approach to prototype adas based on communications vehicle-to-vehicle. In IEEE, editor, The 10th International Conference on Intelligent Transport Systems Telecommunications (ITST 2010), number 6, Kyoto, Japan, November 2010.

## Conférences nationales (2011-2014)

- [1] Yohan Dupuis, Arturo Mendoza Quispe, Pascal Vasseur, Benjamin Castaneda, and Nicolas Ragot. Dépliage d'images omnidirectionnelles optimisé pour la détection de visages. In Congrès de Reconnaissance des Formes et Intelligence Artificielle (RFIA'14), 2014.
- [2] Pierre Merriaux, Rémi Boutteau, Pascal Vasseur, and Xavier Savatier. Algorithme de positionnement d'une passerelle à mouvements compensés à partir de mesures inertielle et lidar pour les opérations de maintenance des parcs éoliens offshore. In Congrès de Reconnaissance des Formes et Intelligence Artificielle (RFIA'14), 2014.
- [3] Y. Dupuis, X. Savatier, J.Y. Ertaud, and P. Vasseur. Détection radiale de visages sur images omnidirectionnelles. In ORASIS, Congrès des jeunes chercheurs en vision par ordinateur, 2013.
- [4] D. Eynard, F. Dong, P. Vasseur, and C. Lecomte. Classification automatique de véhicules à partir d'un capteur stéréo-fisheye. In ORASIS, Congrès des jeunes chercheurs en vision par ordinateur, 2013.
- [5] Rawia Mhiri, Pascal Vasseur, Stéphane Mousset, Rémi Boutteau, and Abdelaziz Bensrhair. Estimation à l'échelle du mouvement d'un réseau multi-caméras non synchronisées. In Congrès de Reconnaissance des Formes et Intelligence Artificielle (RFIA'14), 2014.
- [6] Danda Pani Paudel, Cédric Demonceaux, Adlane Habed, and Pascal Vasseur. Estimation de la pose d'une caméra dans un environnement connu à partir d'un recalage 2d-3d. In Congrès de Reconnaissance des Formes et Intelligence Artificielle (RFIA'14), 2014.
- [7] B. Besbes, A. Rogozan, and A. Bensrhair. Vocabulaire visuel hiérarchique pour la détection et le suivi de piétons en utilisant l'infrarouge lointain. In XIIIème colloque GRETSI sur le traitement du signal et des images (GRETSI-11), 2011.
- [8] J. Pelcat, S. Kramm, and A. Bensrhair. Production de carte dense de disparités dans un contexte industriel par stéréo-corrélation d'images sur deux noyaux monodirectionnels. In ORASIS, Congrès des jeunes chercheurs en vision par ordinateur, 2011.

## Brevets (2010 – 2013)

- [1] D. Hue, A. Bensrhair, and S. Ahiad. Method and system for determining a region of interest in an image, 2013.
- [2] S. Ahiad, D. Hue, and A. Bensrhair. Region of interest positioning for day fog detection algorithm by camera, 2011.
- [3] S. Ahiad, D. Hue, and A. Bensrhair. System and method for defining a search window, 2011.
- [4] J. Lelevé, J. Rebut, A. Bensrhair, and G. Challita. Method for detecting rain on a windscreen, 2010.

## Direction d'ouvrages LITIS, équipe STI (2010-2014)

- [1] Hajime Nagahara, Ryusuke Sagawa, Pascal Vasseur, and Shree K. Nayar. Special Issue on OMNIVIS2009. IPSJ Transactions on Computer Vision and Applications, 2010.

## Participations aux ouvrages LITIS, équipe STI (2010-2014)

- [1] N. Souissi and M. Mainguenaud. Database server models for wms and wfs geographic web services. In Geographical Information Systems : Trends and Technologies, CRC Press (Ed. Elaheh Pourabbas). Mai 2014.
- [2] Saoussen Rekhis, Nadia Bouassida, Rafik Bouaziz, Claude Duvallet, and Bruno Sadeg. Modeling real-time design patterns with the uml-rtdp profile. In Iris Reinhartz-Berger, Arnon Sturm, Tony Clark, Sholom Cohen, and Jorn Bettin, editors, Domain Engineering, pages 59–82. Springer Berlin Heidelberg, 2013.
- [3] Nicolas Vandembroucke, Olivier Alata, Christèle Lecomte, Alice Porebski, and Imt-nan Qazi. Descripteurs de textures couleur. In Frédérique Robert-Inacio Christine Fernandez-Maloigne and Ludovic Macaire, editors, Imagerie couleur numérique : avancées et perspectives, page Chapitre 7. Editions Hermès Science, Collection IC2, Traité Signal et Image, 2012.
- [4] Nicolas Vandembroucke, Olivier Alata, Christèle Lecomte, Alice Porebski, and Imt-nan Qazi. Color texture attributes. In Frédérique Robert-Inacio Christine Fernandez-Maloigne and Ludovic Macaire, editors, Digital Color Imaging, page Chapter 6. Wiley-ISTE, 2012.
- [5] I. Cabani, G. Toulminet, and A. Bensrhair. New robust obstacle detection system using color stereo vision publisher. In IN-TECH, Vienna, Austria, ISBN 978-953-7619-X-X. 2010.

## Conférences "invités" (2010-2014)

- [1] Pascal Vasseur. Omnidirectional vision for vehicle based on an asynchronous camera network. In Omnivis'2014 - Workshop on Omnidirectional Vision, Camera Networks and Non-classical Cameras, May 31- June 7 2014. invited talk.

## Doctorats (2010-2013)

- [1] A. Hadachi. Estimation des temps de parcours fondé sur l'utilisation des données éparses de véhicules traceurs dans un contexte urbain. Phd, INSA de Rouen - Directeur : A. Bensrhair, encadrants : S. Mousset, C. Lecomte, 2013.
- [2] M. Kaddes. Étude des transactions plates et étendues dans les SGBD temps réel. Phd, Université du Havre - Directeur : B. Sadeg, encadrants : A. Berred, L. Amanton, R. Bouaziz, M. Abdouli, 2013.
- [3] B. Alaya. Gestion de la qualité de service et de la mobilité dans les applications multi-média distribuées. Phd, Université du Havre & Université de Sfax - Directeurs : B. Sadeg, F. Gargouri, encadrant : C. Duvallet, 2012.
- [4] J. Pelcat. Reconstruction 3D et production de carte dense de disparité en stéréovision non-alignée pour des applications industrielles de localisation 3D et d'analyse de surface. Phd, INSA de Rouen - Directeur : A. Bensrhair, encadrant : S. Kramm, 2012.
- [5] Y. Prabhakar. Détection des deux roues motorisés par télémétrie laser à balayage. Phd, INSA de Rouen - Directeur : A. Bensrhair, encadrantes : C. Lecomte, P. Subirats, 2013.
- [6] S. Rekhis. Une approche à base de patrons pour la modélisation des applications temps réel. Phd, Université du Havre - Directeur : B. Sadeg, encadrants : C. Duvallet, N. Bouassida, R. Bouaziz, 2013.
- [7] B. Besbes. Intégration de méthodes de représentation et de classification pour la détection et la reconnaissance d'obstacles dans des scènes routières. Phd, INSA de Rouen - Directeur : A. Bensrhair, encadrante : A. Rogozan, 2011.
- [8] A. Haj Said. Réplication de données et tolérance aux fautes dans le processus de validation des transactions temps réel. Phd, Université du Havre - Directeur : B. Sadeg, encadrants : L. Amanton, B. Ayeb, 2011.
- [9] N. Salameh. Conception d'un système d'alerte embarqué basé sur les communications entre véhicules. Phd, INSA de Rouen - Directeur : A. Bensrhair, encadrant : S. Mousset, 2011.
- [10] N. Idoudi. Un Framework pour la modélisation des bases de données temps réel. Phd, Université du Havre & Université de Sfax - Directeurs : B. Sadeg, F. Gargouri, encadrants : C. Duvallet, R. Bouaziz, 2010.
- [11] Y. Li. Image Segmentation and Stereo Vision Matching based on Declivity Line : Application for Vehicle Detection. Phd, Université de Rouen - Directeur : A. Bensrhair, encadrante : G. Toulminet, 2010.
- [12] A. Discant. Fusion des images multi-sources, multi-capteurs pour la détection et la

classification des obstacles routiers. Phd, INSA de Rouen - Directeur : A. Bensrhair, encadrante : A. Rogozan, 2010.