Technical publications

Moëz Cherif [1]

Articles in refereed international journals

[1] **M. Cherif**, “Motion Planning for All-Terrain Vehicles: A Physical Modeling Approach for Coping with Dynamic and Contact Interaction Constraints”, **IEEE Transactions on Robotics and Automation**, vol. 15, no. 2, pages 202–218, April 1999 (regular paper).

[2] **M. Cherif** and K. K. Gupta, “Planning Quasi-static Fingertip Manipulations for Re-configuring Objects”, **IEEE Transactions on Robotics and Automation**, vol 15, no. 5, pages 837–848, October 1999 (regular paper). (*Also appeared as Technical Report CSS-IS TR 96-05, Simon Fraser Univ., Canada, November 1996*).

[3] **M. Cherif** and K. K. Gupta, “A Global Planner for In-Hand Dextrous Re-Configuration of Rigid Objects”, **International Journal of Advanced Robotics**, vol. 13, no. 4, December 1999 (regular paper). (*Paper selected by the committee of IEEE/RSJ IROS'98 for the Advanced Robotics Special Issue IROS'98*).

[4] **M. Cherif**, M. Vidal, and Ch. Laugier, “A Roadmap-based Algorithm for Planning Handling Operations in Changing Industrial Plants”, **International Journal of Robotics and Automation**, regular paper accepted in December 1999. (*Also appeared as Research Report INRIA RR-3629, February 1999*).

Articles under review in refereed international journals

[5] **M. Cherif** and K. K. Gupta, “Global Planning for Dextrous Re-orientation of Rigid Objects: Finger Tracking with Rolling and Sliding”, **International Journal of Robotics Research (IJRR)**, regular paper submitted in June 1999, **conditionally accepted**. (*Also appeared as Research Report INRIA RR-3770, September 1999*).

Articles in book

[1] **M. Cherif** and K. K. Gupta, ”Planning for In-Hand Dextrous Manipulation”, P Agarwal, L. Kavraki, and M. Mason (Eds), **Robotics, The Algorithmic Perspective**, pages 103–117, A.K. Peters Publisher, Wellesley (MA), USA, 1998.

[2] **M. Cherif**, “Physical Models for Solving Off-Road Vehicle Motion Planning”, J. Rix, S. Haas, and J. Teixeira (Eds), **Virtual Prototyping - Virtual Environments and the Product Design Process**, pages 261–270, IFIP, Chapman & Hall, London, U.K. 1995.

[3] Ch. Laugier, Ch. Bard, **M. Cherif**, and A. Joukhadar, “Solving Complex Motion Planning Problems by Combining Geometric and Physical Models: The Cases of a Rover and of a Dextrous Hand”, K. Goldberg, D. Halperin, J-C. Latombe, and R. Wilson (Eds), **Algorithmic Foundations of Robotics**, pages 185–201, A.K. Peters Publisher, Wellesley (MA), USA, 1995.

[4] **M. Cherif**, Ch. Laugier, Ch. Milési-Bellier, and B. Faverjon, “Combining Physical and Geometric Models to Plan Safe and Executable Motions for a Rover Moving on a Terrain”, T. Yoshikawa and F. Miyazaki (Eds), **EXPERIMENTAL ROBOTICS III**, Lecture Notes in Control and Information Sciences, Springer-Verlag, Vol. 200, pages 456–475, October 1994.

Papers in refereed international conferences

[17] **M. Cherif**, J. Ibañez-Guzmán, Ch. Laugier, and T. Goh, ”Motion Planning for an All-Terrain Autonomous Vehicle”, **Int. Conf. on Field and Service Robotics**, Pittsburgh, PA, USA, August, 1999.

[16] **M. Cherif**, ”Kinodynamic Motion Planning for All-Terrain Wheeled Vehicles”, **IEEE Int. Conf. on Robotics and Automation**, Detroit, Michigan, USA, May, 1999.

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[15] **M. Cherif** and K. K. Gupta, "3D In-Hand Manipulation Planning", **IEEE Int. Conf. on Intelligent Robots and Systems**, pages 146–151, Victoria, B.C., Canada, October 1998.

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[13] **M. Cherif** and K. K. Gupta, "Towards Practical Global Motion Planning for In-Hand Manipulation of 3D Objects", **IEEE System, Man and Cybernetics International Multi-conference on Computational Engineering in Systems Applications**, Nabeul-Hammamet, Tunisia, April, 1998.

[12] **M. Cherif** and K. K. Gupta, "Planning for In-Hand Dextrous Manipulation", in Preprints of **Third Workshop on the Algorithmic Foundations of Robotics (WAFR)**, Houston, Texas, March 5-7, 1998.

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[10] **M. Cherif** and K. K. Gupta, "Planning Quasi-static Motions for Re-configuring Objects with a Multi-fingered Robotic Hand", **IEEE Int. Conf. on Robotics and Automation (ICRA)**, pages 986–991, Albuquerque, New Mexico, USA, April 1997.

[9] **M. Cherif**, "On All-Terrain Vehicle Motion Planning", **Third Int. Symposium on Intelligent Robotic Systems**, pages 91–95, Pisa, Italy, July, 1995.

[8] **M. Cherif** and Ch. Laugier, "Motion Planning of Autonomous Off-Road Vehicles Under Physical Interaction Constraints", **IEEE Int. Conf. on Robotics and Automation (ICRA)**, pages 1687–1693, Nagoya, Japan, May 1995 (*Also appeared as Research Report RR-2370, INRIA, France, October 1994*).

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[5] **M. Cherif** and Ch. Laugier, "Dealing with Vehicle/Terrain Interactions when Planning the Motions of a Rover", **IEEE/RSJ/GI Int. Conf. on Intelligent Robot and Systems (IROS)**, pages 579–586, Munich, Germany, September 1994.

[4] **M. Cherif**, Ch. Laugier, Ch. Milési-Bellier, and B. Faverjon, "Planning the Motions of an All-Terrain Vehicle by Using Geometric and Physical Models", **IEEE Int. Conf. on Robotics and Automation (ICRA)**, pages 2050–2056, San Diego, USA, May 1994.

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[2] **M. Cherif**, Ch. Laugier, Ch. Milési-Bellier, and B. Faverjon, "Combining Physical and Geometric Models to Plan Safe and Executable Motions for a Rover Moving on a Terrain", **Third Int. Symposium on Experimental Robotics (ISER)**, pages 22–30, Kyoto, Japan, October 1993.

[1] **M. Cherif** and Ch. Laugier, "Using Physical Models to Plan Safe and Executable Motions for a Rover Moving on a Terrain", **First Workshop on Intelligent Robotic Systems (IRS)**, pages 57–66. J.L.Crowley and A. Dubrowsky (Eds), Zakopane, Poland, July 1993.

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[1] **Ph.D. thesis**, "Motion planning for an autonomous all-terrain vehicle: an approach based upon physical models", Computer Science, Institut National Polytechnique de Grenoble (INPG), Grenoble, France, October 1995, 135 pages, in French. Thesis supervisor: Dr. Christian Laugier, Research Director, INRIA.

[2] **Master thesis**, "Algorithms for automatic generation of functional testing inputs for microprocessors", Computer Science, Institut National Polytechnique de Grenoble, Grenoble, France, June 1991, in French. Thesis supervisor: Dr. Bernard Courtois, Research Director, CNRS.