

Curriculum Vitæ

Thierry FRAICHARD

Born on Feb. 1st, 1964 in Sellières (FR), male, French citizen.

Education

Degree	Topic	Date	Institution
French Habilitation (HDR)	Contributions to Motion Planning	March 06	Grenoble INP ¹
PhD in Computer Science	Motion Planning for Nonholonomic Mobiles in Dynamic Workspaces	April 92	Grenoble INP
MSc in Computer Science	Motion Planning in a Multi-Agent World	June 88	Grenoble INP

Professional History

Start	End	Institution	Position
Dec. 94	Present	INRIA Grenoble Rhône-Alpes	INRIA Research Scientist
June 14	May 15	Bar Ilan Univ., Tel Aviv (IL)	Guest Scientist
Sep. 07	Aug. 08	Swiss Federal Institute of Technology (ETH), Zürich (CH)	Guest Scientist
Sep. 02	Dec. 02	Riken Inst. Tokyo (JP)	JSPS Research Fellow
Nov. 01	Dec. 01	Nanyang Technological Univ. (SG)	Tan Chin Tuan Fellow
Nov. 00	Jan. 01	Nanyang Technological Univ. (SG)	Tan Chin Tuan Fellow
Dec. 93	Nov. 94	Robotics Inst., Carnegie Mellon Univ., Pittsburgh (US)	Post-Doctoral Fellow
Sep. 91	Aug. 93	Univ. Pierre Mendès-France, Grenoble	Junior Lecturer (ATER)
Sep. 88	Aug. 91	Inst. Nat. Polytechnique de Grenoble	Doctoral Fellow

Prizes and Awards

Honours: 1) *INRIA Scientific Excellence Award*: awarded by INRIA to its top researchers [March 14], 2) *IEEE Senior Membership*: awarded by IEEE to its top 10% members in recognition of their professional excellence [Feb. 09], and 3) *European Robotics PhD Award*: granted to my PhD student, Dizan Vasquez, by the European Robotics Network (EURON). This award is yearly given to the best Robotics PhD thesis in Europe [Apr. 09].

Conference Paper Awards: 1) Paper nominated for the best paper award at the IEEE Int. Symp. on Robot and Human Interactive Communication (RO-MAN), Edinburgh (UK) [Aug. 14].

Conference Papers Selected for Special Journal Issues: 1) Int. Symp. of Robotics Research 07 \rightsquigarrow IEEE Trans. on Intelligent Transportation Systems, 2) IEEE-RSJ Int. Conf. on Intelligent Robots and Systems 03 \rightsquigarrow Advanced Robotics Journal, and 3) Int. Conf. on Field and Service Robotics 03 \rightsquigarrow Int. Journal of Robotics Research.

Merit-Based Grants and Fellowships: 1) French Ministry of Research and Education, Doctoral Scholarship [88-91], 2) Nanyang Tech. Univ. (Singapore), Tan Chin Tuan Visiting Fellowships [00] and [01] and 3) Japan Society for the Promotion of Science, Visiting Fellowship [02].

Supervision of Research Activities

I regularly **supervise** graduate students from the French academic system or from foreign universities. I have also supervised Post-Doctoral fellows and contracted engineers.

Category	Count
PhD Students	16
Master Students	16
Foreign Graduate Students	10
Post-Doctoral Fellows	4
Contracted Engineers	5

Collective Responsibilities

I have helped in the **organization** of a number of international events including two high-profile Robotics conferences: *Robotics Science and Systems* (RSS) in 08, and *IEEE-RSJ Int. Conf. on Intelligent Robots and Systems* (IROS) in 97. I have also set up the first two international workshops on guaranteed motion safety. I am currently **Program Co-Chair** for the *2018 IEEE Int. Conf. on Simulation, Modeling, and Programming for Autonomous Robots* (SIMPAN).

I have sat on many **program committees**. I regularly served as an **Associate Editor** for the two main conferences in Robotics, namely the *IEEE Int. Conf. on Robotics and Automation* (ICRA), and the *IEEE-RSJ Int. Conf. on Intelligent Robots and Systems* (IROS). I also served as an Associate Editor for the 2010 edition of the *IEEE Intelligent Vehicles Symp. (IV)*, the premier annual forum on Intelligent Transport. I am currently an **Associate Editor** for the *IEEE Robotics and Automation Letters* (RA-L).

¹Grenoble Inst. of Technology.

I regularly **review** papers for the main international journals and conferences in my field. I am also an expert evaluator for different research agencies worldwide.

I try to get involved in the life of my host institutions (primarily by sitting on different institutional committees). I have co-headed the “Graphics, Vision and Robotics” track of the Int. Master of Science in Informatics at Grenoble (MOSIG).

I regularly serve on PhD/HDR **defence committees** (as member, expert evaluator and president). I also served as an expert evaluator in the selection committee for an Associate Professor position at Univ. Polytech, Clermont-Ferrand (FR) (*May 11*), and in the Robotics PhD 1st Year Validation Jury of the Ecole Nat. Sup. des Mines de Paris (*May 12*).

Management

Over the years, I have been involved in 28 National, European and Bilateral research projects. I was the coordinator of four of these. I also took the leadership of two European project workpackages. My current research projects are: 1) French EMERGENCE-LIG project “Human-Robot Motion: a Bio-Inspired Approach” [*Jan.-Dec 18*] (**coordination**). 2) French project FUI **STAR**, “Fast Autonomous Transport System” [*Jan. 18-Dec. 20*]. 3) European project H2020-ICT-645097 **COMANOID**, “Multi-Contact Collaborative Humanoids in Aircraft Manufacturing” [*Jan. 15-Dec. 19*]. 4) French action ANR-11-LABX-0025-01 **RHUM**, “Robots in Human Environments” [*Sep. 15-Dec. 19*].

Mobility, Collaborations

Besides my post-doctoral stay at the Robotics Inst. in Carnegie Mellon Univ., Pittsburgh PA [*93-94*], I have made a number of **long-term visits** in different research groups worldwide: 1) Robotics & AI Lab., Bar Ilan Univ., Tel Aviv (IL) [*14-15*], 2) Autonomous Systems Lab., Swiss Federal Inst. of Technology (ETH), Zürich (CH) [*07-08*], 3) Distributed Adaptive Robotics Research Unit, Riken Inst., Saitama (JP) [*02*] and 4) Intelligent Systems Lab., Nanyang Tech. Univ. (NTU), Singapore [*00*] and [*01*].

I had **collaborations** with different researchers abroad: 1) Prof. James Kuffner, Robotics Inst., Carnegie Mellon Univ., Pittsburgh (US), 2) Prof. Zvi Shiller, Univ. of California, Los Angeles (US) and then Univ. of Ariel (IL) and 3) Prof. Jose-Luis Gordillo, Centro de Sistemas Inteligentes, Tecnológico de Monterrey (MX).

Teaching

I teach on a regular basis both at the graduate and undergraduate levels (primarily at Grenoble Univ.). Besides courses directly related to my research activities, *i.e.* Robotics and motion planning, I teach in other areas as well, *e.g.* programming. I have been giving a yearly *Motion Planning* course at the graduate level (MSc 2 of Grenoble Univ.) and in the French-Mexican Summer School on Image and Robotics. In 2011, this course has been completed by two introductory Robotics courses given at the graduate (MSc 1) and undergraduate (BSc 3) levels. I have been invited to give Robotics and motion planning courses in three universities abroad: Algiers (DZ), Zaragoza (ES) and Damascus (SY).

Dissemination of Scientific Knowledge

Besides the talks I regularly give at conferences in front of academic audiences, I have given 6 conferences for general audiences in France and 28 invited seminars in foreign universities and research institutes. I have 3 publications in non scientific journals.

Miscellaneous

My research activities have yielded two patents: 1) French patent by INRIA: #FR0552735, *Procédé d’assistance à la conduite d’un véhicule et dispositif associé* [*Sep. 09*] and 2) Mexican patent by the Tecnológico de Monterrey: #MX/E/2012/082045, *Rampa retractil automatica para carga y descarga* [*Dec. 12*].

Publications

The results of my work are regularly published in the main international conferences in Robotics, *e.g.* *IEEE Int. Conf. on Robotics and Automation* (ICRA) and *IEEE-RSJ Int. Conf. on Intelligent Robots and Systems* (IROS). I have also published chapters in reference book series, *e.g.* Springer *Lecture Notes in Computer Science* (LNCS) and *Springer Tracts in Advanced Robotics* (STAR), and articles in the top international journals in the Robotics field, *e.g.* *Int. Journal of Robotics Research* (IJRR), *IEEE Trans. on Robotics* (TRO) and *Autonomous Robots* (AURO). As of today, Google Scholar credits me with **4300+ citations and a h-index of 37**.

Publication type	Count
International journals	18
Popular Journals	4
Book chapters	13
Editorial works	2
Peer-reviewed international conferences	78

A detailed version of my Curriculum Vitæ is available at <http://thierry.fraichard.free.fr>.

Thierry Fraichard
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