



Curriculum Vitae

Personal information

First name / Surname **Cornel Brişan**
Address(es) Gilau, 1323, Romania
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Date of birth 12.11.1963

Work experience

Dates 2003 – present; 1998 – 2003; 1995 – 1998; 1991 – 1995;
Positions held University professor, university reader, university lecturer, university assistant
Main activities and responsibilities Research, teaching
Main courses: Elements of Advanced Robotics, Robotics and Nanotechnologies
Name and address of employer **TECHNICAL UNIVERSITY OF CLUJ-NAPOCA**, B-dul Muncii 103-105, Cluj-Napoca, Romania
Type of business or sector Higher education
Dates 2001 – 2002
Position held Alexander von Humboldt post-doctoral research fellow-Prof. Manfred Hiller
Main activities and responsibilities Research: Parallel and Reconfigurable robots areas
Name and address of employer **DUISBURG UNIVERSITY**, Lotharstr. 1. Duisburg, Germany
Type of business or sector Research
Dates 1988 – 1991
Position held Mechanical engineer
Main activities and responsibilities Mechanical design
Name and address of employer **Romanian Railway Company**
Type of business or sector Industry

Education and training

Dates 1990 – 1995
Title of qualification awarded Dr. -Ing.
Activity *Ph.D. thesis*
Name and type of organisation Department of Mechanics
Technical University of Cluj-Napoca, Cluj-Napoca, Romania
Dates 1983-1988
Title of qualification awarded Dipl. Ing., Engineer

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|--|---|------------------|------------------|------------------|------------------|--------------------|------------------|-------------------|------------------|------------------|
| Name and type of organisation | Faculty of Mechanics Polytechnical Institute of Cluj-Napoca, Cluj-Napoca, Romania | | | | | | | | | |
| Personal skills and competences | | | | | | | | | | |
| Mother tongue(s) | Specify mother tongue (if relevant add other mother tongue(s), see instructions) | | | | | | | | | |
| Other language(s) Self-assessment | | | | | | | | | | |
| European level (*) | Understanding | | | | | Speaking | | | | Writing |
| | Listening | | | Reading | | Spoken interaction | | Spoken production | | |
| | English | | | | | | | | | |
| | German | C1 | Independent user | C1 | Independent user | C1 | Independent user | C1 | Independent user | C1 |
| | B2 | Independent user | B2 | Independent user | B2 | Independent user | B2 | Independent user | B2 | Independent user |
| Social skills and competences | (*) Common European Framework of Reference for Languages Work experience in multicultural environment both home and abroad | | | | | | | | | |
| Organisational skills and competences | PhD supervisor Manager for more than 20 national and 2 international research grants. Appendix 1 | | | | | | | | | |
| List of publications | Appendix 2 | | | | | | | | | |

Appendix 1 Managerial experience National research grants

| No | Title | Period | Financial support | Remarks |
|----|---|-----------|-------------------|--------------------------------|
| 1 | Topology, kinematics and dynamics of human locomotion. Computer modelling. | 1993-2000 | MCT | Manager Partener manager |
| 2 | Research concerning human biomechanics in pathological conditions. Modelling and simulation. | 1996-1999 | MCT | |
| 3 | Research concerning parallel robots with reconfigurable topology. | 2000-2001 | ANSTI | |
| 4 | Research concerning topology, kinematics and dynamics of hybrid service robots. | 2000-2002 | CNCSIS | |
| 5 | Research concerning mechatronic systems in medical area. | 2000-2001 | CNCSIS | |
| 6 | Research concerning robotic systems in civil engineering. | 2001-2003 | CNCSIS | |
| 7 | Research concerning development of robotic systems with artificial tactil properties. | 2004-2006 | CNCSIS | |
| 8 | Research concerning modelling of self reconfigurable robots. | 2006-2008 | CNCSIS | |
| 9 | Research concerning development of machine tools with reconfigurable topology (IDEI Project). | 2007-2010 | CNCSIS | |
| 10 | Reconfigurable Haptic Interfaces used in Dynamic Contact Reproduction -Theoretical and Experimental Developments. | 2012-2016 | UEFISCD I | |

International research grants

| No. | Title | Period | Financial supported by | Remarks |
|-----|-------|--------|------------------------|---------|
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|----|---|-----------|-----------------------------------|---------|
| 1. | Research concerning theoretical development and experimental validation of Reconfigurable Haptic Interfaces for Virtual Reality | 2012-2016 | Alexander von Humboldt Foundation | manager |
| 2. | Mathematical Modeling and Experimental Research on Anthropomorphic Parallel Robots | 2003-2008 | Alexander von Humboldt Foundation | |
| 3. | Parallelkinematiken für Werkzeugmaschinen | 2001-2002 | DVG | member |

Appendix 2 - Relevant publications

- V.Chiroiu, **C.Brişan**, D.Dumitriu and L.Munteanu, A sonification algorithm for developing the off-road models for driving simulators, *Mechanical Systems and Signal Processing*, vol. 98, January 2018, 310-323, 2018.
- V.Chiroiu, L.Munteanu, D.Dumitriu, C.Rugina and **C.Brişan**, On the sonic films with defects, *Proceedings of the Romanian Academy, series A*, 2017 (in press).
- S.I. Dumitriu, **C.Brişan**, D. Dumitriu, V. Chiroiu, On the soft robotics constitutive laws, *Romanian Journal of Technical Science - Applied Mechanics*, Tome 62, nr.1, pp. 68-80, Bucarest, 2017.
- L.Munteanu, V.Chiroiu, **C. Brişan**, D.Dumitriu, T.Sireteanu and S.Petre., On the 3D normal tire/off-road vibro-contact problem with friction, *Mechanical Systems and Signal Processing*, 54-55(C), 377–393, 2015.
- L.Ilea, C.Boanta, **C. Brişan** and V.Chiroiu, Aspects Concerning Algorithms of VRML Surfaces' Generation, In L. T. De Paolis & A. Mongelli (Eds.), *Augmented and Virtual Reality (Vol. 9254, p. 482–489)* Cham: Springer International Publishing, 2015.
- C.Boantă, C.Lăpusan, D. Dumitriu, V.Chiroiu and **C.Brişan**, Topological and Kinematic Analysis of a 6-DOF Driving Simulator , *Applied Mechanics and Materials*, 762, pp.119–124, 2015.
- L.Munteanu, D. Dumitriu, V.Chiroiu, **C. Brişan**, M. Bara and D.Marin, On the tactile sensing based on the smart materials, *CMC: Computers, Materials & Continua*, 46(2), 79-103, 2015.
- L.Munteanu, V. Chiroiu, Ş. Donescu, and **C. Brişan**, A new class of sonic composites, *Journal of Applied Physics*, vol. 115, no. 10, p. 104904, Mar. 2014.
- L.Munteanu, C.Brişan, V.Chiroiu, D.Dumitriu and R.Ioan, Chaos-hyperchaos transition in a class of models governed by Sommerfeld effect, *Nonlinear Dynamics*, 78(3), 1877-1889, 2014.
- A.Csiszar, C.Boanta, S.Hoher, **C.Brişan**, and A.Verl, Optimal Design Concept of a Reconfigurable Haptic Device. Cham: Springer International Publishing, pp. 267–272, 2014.
- V.Chiroiu, L.Munteanu, D.Dumitriu, **C.Brişan** and R.Ioan, On the stability of a class of nonideal systems, *Romanian Journal of Acoustics and Vibration*, XI(2), pp. 88-93, 2014.
- V.Chiroiu, **C.Brişan**, M.Popescu, I.Girip, and L.Munteanu, On the sonic composites without/with defects”, *Journal of Applied Physics*, vol. 114, no. 16, p. 164909, 2013.
- C.Brişan**, R. - V.Vasiu, and L.Munteanu, A modular road auto-generating algorithm for developing the road models for driving simulators, *Transportation Research Part C: Emerging Technologies*, vol. 26, no. C, p. 269–284, Jan., 2013.
- D.Dumitriu, L.Munteanu, **C.Brişan**, V.Chiroiu, R.-V.Vasiu, O.Melinte and V.Vlădăreanu, On the continuum modeling of the tire/road dynamic contact, *CMES: Computer Modeling inEngineering and Sciences*, 94(2), pp.159-173, 2013.
- C.Brişan**, L.Munteanu, V.Chiroiu and R.Ilie, Scattering of acoustical waves by periodic arrays of scatterers, *Acta Technica Napocensis, Series: Applied Mathematics and Mechanics*, 56(IV), pp. 625-630, 2013.
- L.Munteanu, **C.Brişan**, V.Chiroiu, and S.Donescu, On the compression viewed as a geometric transformation, *Computers, Materials and Continua*, vol. 31, no. 2, pp. 127–146, 2012.
- L.Munteanu, C.Brişan, V.Chiroiu and Şt.Donescu, A 3D model for tire/road dynamic contact, *Acta Technica Napocensis, Series: Applied Mathematics and mechanics*, 55, III, pp. 611-614, 2012.
- C. Brişan** and A.Csiszar, Computation and analysis of the workspace of a reconfigurable parallel robotic system, *Mechanism and Machine Theory*, vol. 46, no. 11, pp. 1647–1668, Nov., 2011.
- A. Capustiac and **C. Brişan**, Aspects Concerning VRML Simulation of Calibration for Parallel Mechanisms. Dordrecht: Springer Netherlands, 2010, p. 73–81.

Patent number: RO921396 B1 / 2007 : Variator de turație, precesional, Patent Assignee: Technical University of Cluj Napoca, Inventors: Mircea Bara, **Cornel Brişan**

European Patent EP2444209 / 2012: Method for generating kinematical structures of a reconfigurable parallel robot with vertical actuators and its comprising system, Patent Assignee: Technical University of Cluj Napoca, Inventors: **Cornel Brişan**, Manfred Hiller.

National Patent Number A/00145 : Procedure and 3D printer for making items containing net-works of composite materials, Inventors: **Brișan Cornel**, Bara Mircea, Munteanu Ligia, Chiroiu Veturia, 26 feb. 2015

12 Octombrie, 2017

A handwritten signature in blue ink, appearing to read 'CBrișan', is written over a light blue rectangular stamp or watermark.

Cornel Brișan