Curriculum Vitae

José-Luis Vilchis-Medina

▶ PhD. in Computer Science ^a

ENSTA Bretagne 2, Rue François Verny 29200, Brest, France

a. (based-logic Artificial Intelligence)

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► Current Situation ◀

	ENSTA Bretagne	
Sep-2023/today	Lab-STICC (UMR 6285), ROBEX team.	Ducat France
	Researcher of Computer Science working on	Brest, France
	multi-agents coordination and behaviour simulation.	

● Employment Situation **▶**

Oct-2021/Aug-2023	French Naval Academy French Naval Academy Research Institute (IRENav EA3634), MoTIM group. Assistant Professor of Computer Science.	Brest, France
Oct-2020/Sep-2021	ONERA-The French Aerospace Lab DTIS – Traitement de l'information et systèmes, Systèmes Embarqués, Autonomes et Sûrs (SEAS) unit. Postdoctoral position	Toulouse, France
Oct-2019/Sep-2020	Laboratoire d'Informatique, de Robotique et de Microélectronique de Montpellier $-$ LIRMM $EXPLORE\ team.$ Postdoctoral position	Montpellier, France
Sep-2018/Aug-2019	Aix-Marseille Université CAlcul NAturel team Faculty of Sciences, Bachelor in Computer Science. Teaching-Research position (ATER \approx 192H)	Marseille, France

ightharpoonup Research Interest

- $\bullet \ \ Knowledge \ Representation \ \mathcal{E} \ Reasoning$
- Non-classical Reasoning
- $\bullet \ \ Logic \ \mathcal{E} \ Proof \ Theory$

- Planning and Decision Theory
- $\bullet \ \ Autonomous{\rm -}Intelligent \ Agents$
- ullet Embedded Systems

▶ Education **◄**

PhD. in Computer Science

Laboratoire d'Informatique et Systèmes (LIS) CAlcul NAturel team

Title:

Modeling of Resilient System in Default Logic.
Application to Solar Power UAV.

 $\mathbf{Oct}\text{-}\mathbf{2015}/\mathbf{Dec}\text{-}\mathbf{2018}$

(Supervisor) PR Pierre Siegel, LIS, Marseille (co-Supervisor) PR Andrei Doncescu, LAAS, Toulouse

 $\frac{(Rapporteur)}{(Rapporteur)} \frac{\text{PR Lakhdar Sa\"{is}, CRIL, Lens}}{\text{Grenoble Alpes}}, \text{Universit\'e}$

PR Amal El Fallah Seghrouchni, LIP6, Paris
PR Yves Lacroix, Université de Toulon
MCF Vincent Risch, LIS, Marseille

M.Sc. in Electrical and Automation Engineering

INP-ENSEEIHT

Option:

Control, Decision and Critical Computing Systems

Sep-2015 Title:

Design of a versatile electronic demonstrator for the measurement of displacements by optical re-injection in a laser diode, with control of the emitted beam.

Supervisors:

Julien PERCHOUX and Antonio LUNA ARRIAGA

B.Sc. in Electronics Engineering

Universidad Autónoma de Baja California

Option:

Aug-2012 Control Systems - with Honors

Ensenada, Mexico

Toulouse, France

Marseille, France

Final Project:

Design of an embedded system for agricultural applications.

► Price – Awards ◀

High academic achievement by the National Evaluation Center (CENEVAL)

Universidad Autónoma de Baja California, Promotion 2012 B.Sc. in Electronic Engineering.

Mexico-France Exchange Engineers Technology (MEXFITEC)

Electronic and Signal Processing, 1-year exchange (BAC+4) at INP-ENSEEIHT.

► <u>Languages</u> <

SpanishEnglishFrançaisPortugaisMother tongueAdvanced levelAdvanced levelIntermediate level

► Technical Skills ◀

Text editor: LATEX, Vim; Programming languages: Prolog, C/C++, Python, Bash, HTML, Matlab,

ROS2/Gazebo; Operating System: macOS, Linux, Windows (less usage)

► Supervision ◀

-2022

- Master Students :
 - Tom Ravaud from ParisTech, Master 1, research internship (6 months). Working on "Automatic docking of a drone on a mobile platform using ROS2".
 - Maelys Lupin from ENIB, Master 1, mentored projet (4 months). Working on "Modeling of a hexapod robot using ROS2".

▶ Publications ◀

- [9] José Luis VILCHIS MEDINA. "Evaluation and Identification of Properties in a Set of Information through Qualitative and Non-monotonic Reasoning". In: The 6th International Conference on Computer Science and Artificial Intelligence (CSAI, abstract only) (2022).
- [8] José-Luis VILCHIS-MEDINA, Karen GODARY-DÉJEAN et Charles LESIRE. "Autonomous Decision-Making With Incomplete Information and Safety Rules Based on Non-Monotonic Reasoning". In: *IEEE Robotics and Automation Letters* 6.4 (2021), p. 8357-8362.
- [7] José Luis Vilchis Medina et al. "A Resilient Behavior Approach Based on Non-monotonic Logic". In: Journées d'Intelligence Artificielle Fondamentale (2020), p. 16.
- [6] José Luis Vilchis Medina et al. "A Resilient Behavior Approach Based on Non-monotonic Logic". In: Mexican International Conference on Artificial Intelligence. Springer. 2019, p. 403-413.
- [5] José Luis Vilchis Medina et al. "An Implementation of a Nonmonotonic Logic in an Embedded Computer for a Motor-glider". In: 35th International Conference on Logic Programming (ICLP). Accepted. 2019.
- [4] José Luis Vilchis Medina, Pierre Siegel et Andrei Doncescu. "Non-monotonie et Resilience : Application au Pilotage d'un Motor-planeur Autonome". In : Journées d'Intelligence Artificielle Fondamentale 12 (2018), p. 6.
- [3] José Luis Vilchis Medina et al. "Intelligent and Adaptive System based on a Non-monotonic Logic for an Autonomous Motor-glider". In: 2018 15th International Conference on Control, Automation, Robotics and Vision (ICARCV). IEEE. 2018, p. 442-447.
- [2] José-Luis Vilchis Medina, Pierre Siegel et Andrei Doncescu. "Contrôle de Vol d'un Planeur Basé sur une Logique Non-monotone". In : Journées Francophones sur la Planification, la Décision et l'Apprentissage pour la conduite de systèmes (JFPDA 2017). 2017.
- [1] Vilchis Medina, Pierre Siegel et Andrei Doncescu. "Autonomous Aerial Vehicle Based on Non-Monotonic Logic". In: 3rd International Conference on Vehicle Technology and Intelligent Transport Systems (VE-HITS). 2017, 6p.