Curriculum Vitae

Mr. José-Luis Vilchis-Medina

➔ ***PhD. in Computer Science*** [a]
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a. (based-logic Artificial Intelligence)

► Current Situation ◄

Sep-2023/today	**ENSTA Bretagne** *Lab-STICC (UMR 6285), ROBEX team.* **Researcher of Computer Science.**	**Brest, France**

◖ 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 ≈ 192H)**	**Marseille, France**

► Subjects of Research ◄

- *Knowledge Representation and Reasoning*
- *Non-monotonic Reasoning*
- *Qualitative and Automated Reasoning*
- *Declarative Programming*
- *Planning and Decision Theory*
- *Autonomous–Intelligent Agents*

► Education ◄

PhD. in Computer Science
Laboratoire d'**I**nformatique et **S**ystèmes (LIS)
CAlcul NAturel team

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

Oct-2015/Dec-2018 — **Marseille, France**

(**Supervisor**) PR Pierre Siegel, LIS, Marseille
(**co-Supervisor**) PR Andrei Doncescu, LAAS, Toulouse
(*Rapporteur*) PR Lakhdar Saïs, CRIL, Lens
(*Rapporteur*) PR Jacques Demongeot, Université Grenoble Alpes
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

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.

Sep-2015 — **Toulouse, France**

Supervisors :
Julien PERCHOUX and Antonio LUNA ARRIAGA

B.Sc. in Electronics Engineering
Universidad Autónoma de Baja California

Option :
Control Systems - *with Honors*

Aug-2012 — **Ensenada, Mexico**

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.

► Languages ◄

Spanish	**English**	**Français**	**Portugais**
Mother tongue	Advanced level	Advanced level	Basic-Intermediate level

► Technical Skills ◄

Text editor : LaTeX, Vim ; **Programming languages :** Prolog, C/C++, Python, Bash, HTML, MATLAB, ROS2 ; **Operating System :** macOS (mainly), Linux, Windows

► Supervision ◄

— **2023**
  — Post-doctoral Students :
    - *Youcef Belkhier co-supervised with Jean-Frédéric Charpentier and Florent Becker (18 months). Working on "Multisource energy management system in a naval environment", École navale.*

— **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 (VEHITS)*. 2017, 6p.