# Curriculum Vitae

## Mr. José-Luis Vilchis-Medina

▶ PhD. in Computer Science <sup>a</sup>

2 Rue François Verny 29200, Brest

France

a. (Artificial Intelligence & Logic)

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## ► Current Situation ◀

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

# **●** 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

# ► Subjects of Research ◀

- $\bullet \ \ Knowledge \ Representation \ and \ Reasoning$
- Non-monotonic Reasoning
- Qualitative and Automated Reasoning
- Logic Programming
- Decision Theory and Planning
- $\bullet \ \ Autonomous{\rm -}Intelligents \ Agents$

## **▶** 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.

Oct-2015/Dec-2018 (Supervisor) PU Pierre Siegel, LIS, M

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

Marseille, France

(Rapporteur) <u>PU Lakhdar Saïs,</u> CRIL, Lens (Rapporteur) PU Jacques Demongeot, Université

Grenoble Alpes

PU Amal El Fallah Seghrouchni, LIP6, Paris

PU 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: Toulouse, France

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

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> <

Spanish English Français Portugais

Mother tongue Advanced level Advanced level Basic-Intermediate level

## ► Technical Skills ◀

Text editor: IATEX, 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 (VE-HITS). 2017, 6p.