# Curriculum Vitae

## José-Luis Vilchis-Medina

➜ *PhD. in Computer Science* [a]
ENSTA – Institut Polytechnique de Paris
2, Rue François Verny
29200, Brest, France

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a. (based-logic Artificial Intelligence)

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## ► Current Situation ◄

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|---|---|---|
| **Sep-2023/today** | **ENSTA – Institut Polytechnique de Paris**<br>*Lab-STICC (UMR 6285), ROBEX team.*<br>**Researcher of Computer Science** working on<br>multi-agent coordination and behavioral simulation. | **Brest, France** |

## ◖ Employment Situation ◗

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

## ► Research Interest ◄

- *Knowledge Representation & Reasoning*
- *Non-monotonic Reasoning*
- *Autonomous–Intelligent Agents*
- *Logic & Proof Theory*

# ► <u>Education</u> ◄

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| **Oct-2015/Dec-2018** | **<u>PhD. in Computer Science</u>**<br>**L**aboratoire d'**I**nformatique et **S**ystèmes (LIS)<br>CAlcul NAturel team<br><br>**Title :**<br>*Modeling of Resilient System in Default Logic.*<br>*Application to Solar Power UAV.*<br><br>(**Supervisor**) <u>PR Pierre Siegel</u>, LIS, Marseille<br>(**co-Supervisor**) <u>PR Andrei Doncescu</u>, LAAS, Toulouse<br>(*Rapporteur*) <u>PR Lakhdar Saïs</u>, CRIL, Lens<br>(*Rapporteur*) <u>PR Jacques Demongeot</u>, Université<br>Grenoble Alpes<br><u>PR Amal El Fallah Seghrouchni</u>, LIP6, Paris<br><u>PR Yves Lacroix</u>, Université de Toulon<br><u>MCF Vincent Risch</u>, LIS, Marseille | **Marseille, France** |
| **Sep-2015** | **<u>M.Sc. in Electrical and Automation Engineering</u>**<br>INP-ENSEEIHT<br><br>**Option :**<br>Control, Decision and Critical Computing Systems<br>**Title :**<br>*Design of a versatile electronic demonstrator for the*<br>*measurement of displacements by optical re-injection in a*<br>*laser diode, with control of the emitted beam.*<br><br>**Supervisors :**<br>Julien PERCHOUX and Antonio LUNA ARRIAGA | **Toulouse, France** |
| **Aug-2012** | **<u>B.Sc. in Electronics Engineering</u>**<br>Universidad Autónoma de Baja California<br>**Option :**<br>Control Systems - *with Honors*<br>**Final Project :**<br>*Design of an embedded system for agricultural*<br>*applications.* | **Ensenada, Mexico** |

# ► <u>Price – Awards</u> ◄

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| **High academic achievement by the National Evaluation Center (CENEVAL)**<br><br>Universidad Autónoma de Baja California, Promotion 2012<br>B.Sc. in Electronic Engineering. |
| **Mexico-France Exchange Engineers Technology (MEXFITEC)**<br><br>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 | Intermediate level |

# ► <u>Technical Skills</u> ◄

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

# ► <u>Supervision</u> ◄

— **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–GAZEBO".*
- *Maelys Lupin from ENIB, Master 1, mentored projet (4 months). Working on "Modeling of a hexapod robot using ROS2–GAZEBO".*

# ► Publications ◄

[10]  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.

[9]  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.

[8]  José Luis Vilchis Medina et al. "A Resilient Behavior Approach Based on Non-monotonic Logic". In : *Journées d'Intelligence Artificielle Fondamentale* (2020), p. 16.

[7]  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.

[6]  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.

[5]  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.

[4]  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.

[3]  José-Luis Vilchis-Medina. "Building Intelligent Databases through Similarity : Interaction of Logical and Qualitative Reasoning (to appear)". In : *The 7th International Conference on Algorithms, Computing and Artificial Intelligence (ACAI), 2024* (2024).

[2]  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).

[1]  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.