

Jose Edgar Hernandez Cancino E.

BSc in Robotics Engineering and **MSc in Artificial Intelligence** candidate (Aug. 2026) in the Erasmus Mundus EMAI program. Current research focus on perceptual guidance in vision-language-action models for robot manipulation, with interest in robotic perception and control, and multimodal reasoning.

Research

- 2026 **Explicit Perceptual Guidance in Vision-Language-Action Models – MSc Thesis Research**
Visual Cognitive Systems Laboratory (ViCoS), University of Ljubljana
Investigating how perceptual guidance can improve robot manipulation in vision-language-action models, through expert-aligned representations and language-conditioned token grounding.
Supervisor: Prof. Dr. Danijel Skočaj
- 2026 **PIU: Proximity-guided Identity Unlearning in ID-Conditioned Diffusion Models**
Computer Vision Laboratory, University of Ljubljana
Targeted identity unlearning in ID-conditioned diffusion models while preserving generation utility.
First-author submission to IEEE IJCB 2026 [View](#)

Education

- 2024 – 2026 **MSc in Artificial Intelligence (Erasmus Mundus)**
(Expected) *Pompeu Fabra University – Sapienza University – University of Ljubljana*
- 2021 – 2024 **BSc in Robotics and Digital Systems Engineering**
Tecnológico de Monterrey GPA 96 /100

Experience

- Mar. 2022 – **Machine Learning Engineer (Part-Time)**
Jan. 2026 *Saveware — Remote* [View](#)
Developed an attention-based model for trailer-loading duration prediction with uncertainty estimation, and designed automated data-processing and reporting tools for operational efficiency analysis.
- Jan. 2024 – **Visiting Researcher – Kavradi Lab**
Feb. 2024 *Rice University — Houston, USA* [View](#)
Integrated motion planning with Samsung's SceneGrasp model for multi-object 3D shape reconstruction and grasp pose estimation from RGB-D data on a UR5 robot.

Projects

- 2025 **Uncertainty-Aware Road Obstacle Identification with Conformal Guarantees**
Sapienza University [View](#)
Reproduced Noguchi et al. (2024) on unknown-objectness scoring for road-scene segmentation and applied conformal prediction to provide statistical guarantees on empirical risk.
- 2024 **Autonomous Localization and Navigation System for Differential Drive Robot**
Tecnológico de Monterrey [View](#)
Developed a vision / LiDAR-powered autonomous vehicle for reactive navigation. Odometry fusion with Extended Kalman Filter for localization. Edge-deployed on NVIDIA Jetson.
- 2023 **Deep Reinforcement Learning for Trajectory Planning of a Robotic Arm**
Tecnológico de Monterrey [View](#)
Implemented Deep Deterministic Policy Gradient (DDPG) and Hindsight Experience Replay (HER) to learn a policy for point-to-point motion and precise target positioning in joint space.

Stack

AI/ML: PyTorch, Hugging Face, OpenCV, Diffusers, CUDA
Tools: Docker, W&B, AWS, Google Cloud
Embedded: FreeRTOS, MQTT, CAN, STM32

Robotics: ROS, SLAM, LiDAR
Languages: Python, C, C++, MATLAB