Designação do projecto: XPro - Explainable probabilistic models for robot applications

Código do projecto: XPro

Entidade beneficiária: ISR-UC

Data de Início: 26-03-2024

Data de conclusão: 25-03-2026

Custo total elegível:

Apoio financeiro: FCT, DAAD

Abstract: XPro is a bilateral project between ISR-UC and Universität Greifswald, funded by FCT (Portugal) and DAAD (Germany), aiming to tackle an important problem in engineering and robotics - probabilistic explainability of deep-models for robot-critical applications such as autonomous robot-perception, self-driving robot-vehicles, and decision making. XPro will focus on explainability by developing post-hoc techniques applied to existing pre-trained deep models applied to robot perception. In terms of case studies, XPro will explore two application domains, robotic perception and autonomous robotic-vehicles. Collectively, the XPro team will work in collaboration with young and senior researchers, as well as PhD students, for developing new probabilistic-based post-hoc calibration towards explainable models, new uncertainty-quantification evaluation metrics, real-world application domains (ie, relevant case-studies), dissemination and short-term missions will be carried-out as well.

Partners: ISR-UC, Universität Greifswald.