A computer vision non-intrusive mechanism to collect images and give real-time insights about animals behaviour on coral reefs in Mozambican waters

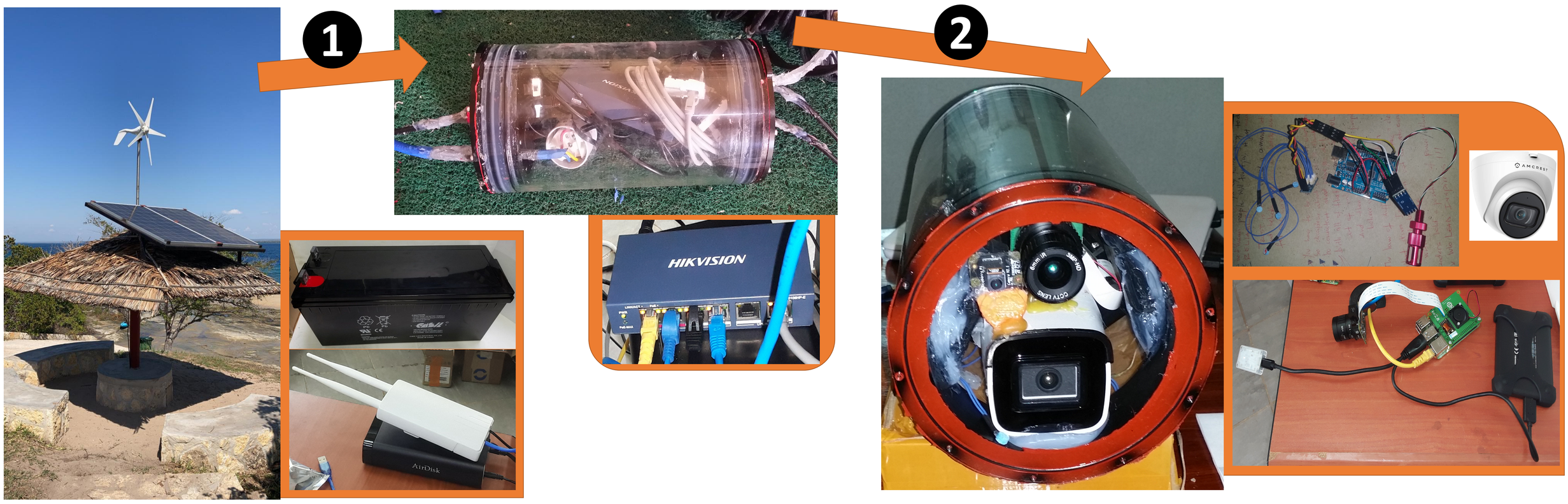
Luís Pina[1,2], Tiago Azevedo[3], Natu Lauchande[4], Erwan Sola[5]

[1]Centro de Estudos e Projectos em Engenharia (CEPrE), Faculdade de Engenharia, Universidade Lúrio, Mozambique
[2]Computer Engineering Department, Faculdade de Engenharia, Universidade Lúrio, Mozambique
[3]Department of Computer Science and Technology, University of Cambridge, United Kingdom
[4]Car track, South Africa
[5]Wildlife Conservation Society, Mozambique

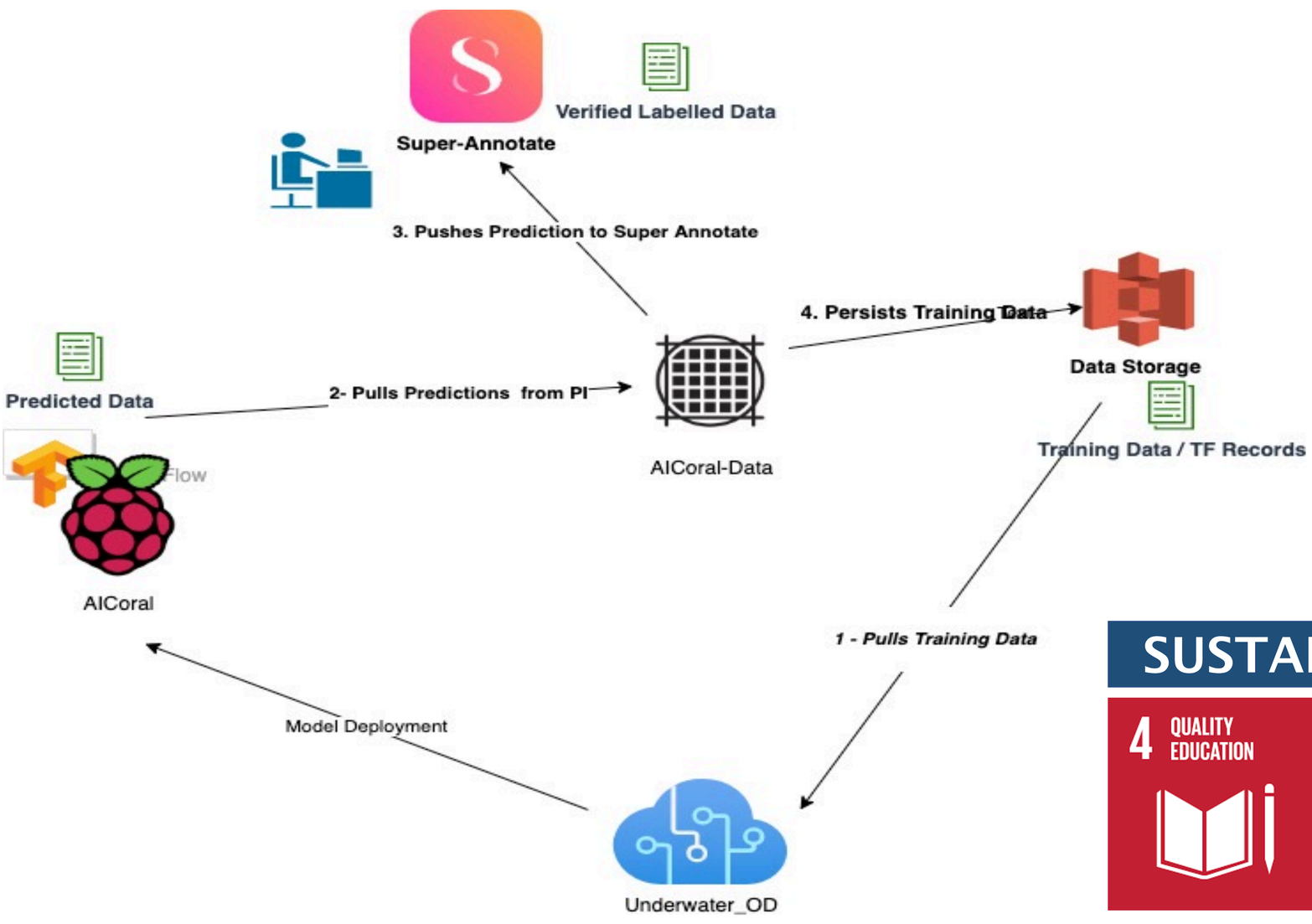
ABSTRACT

Our research goal is to develop a non-intrusive deep learning mechanism to collect images to give insights about coral reefs in Nacala Porto. This will allow biologists to analyse data in real-time and infer on animals' life story, behaviour, population, and survivorship in Mozambican waters. Initially, the coral reef will be located between 10 – 15 meters depth and 90 – 100 meters from the central power supply site on Nacala Porto. In particular, we will deploy an artificial reef to study the development of a fish community around a newly introduced structure to gain insight on the potential for ecosystem improvement in the context of coral reef restoration.

LOGIC DIAGRAM



DATA PIPELINE DIAGRAM



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