



## Augmenting Ocean Observing through Artificial Intelligence: Annotation, Data Standards, and Applications

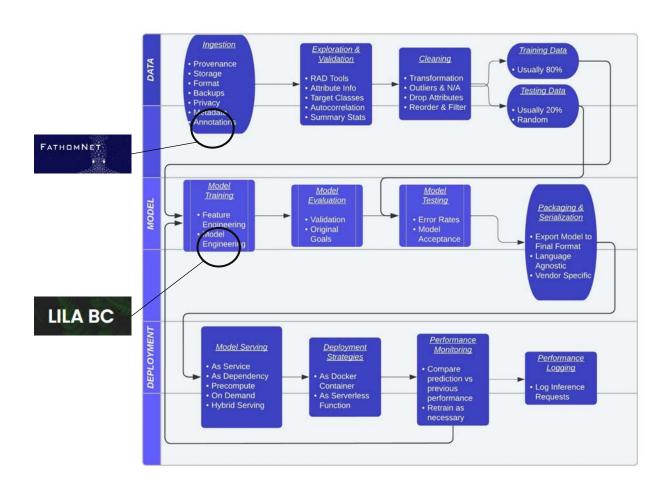
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## **Overview of the Project**

- Developing an AI resource on SECOORA's existing digital infrastructure that
  - Serves as an organized gateway to complementary AI resources
  - Hosts reproducible ocean observing pipelines to help regional partners complete AI projects through worked examples
- Existing AI resources are often specialized
  - How do you engage resources in one place?









## Accomplishments

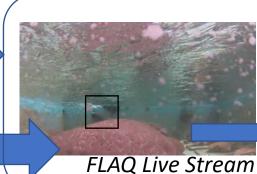
**Documentation** 

Al annotation libraries, model repositories, standards, metadata and formatting requirements, and storage and access solutions.

- 8 meetings with different industry, academia, non-profit, and government AI stakeholders and domain experts;
- 2 machine learning training exercises;
- 3 symposia; 2 workshops

Use Cases

Video







Edge Computing Data Buoy





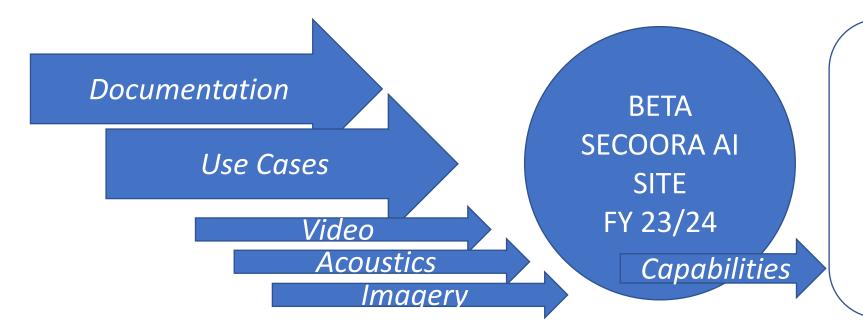
Modeling Workshop



Boat/No-boat; Fish/No-fish/



## **Challenges and Looking Ahead**



- Connections to other libraries
  - NCEI
  - Fathomnet
  - Coralnet
  - Lila
- Model Zoo
  - Yolo, ResNet, Chirp
- Standards and formatting
- Video, acoustic, imagery management applications





