

SONY



Cloud SDK Deserialize Sample Functional Specifications

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1. Change history

Date	What/Why
2022/11/16	Initial draft
2023/1/30	Unified the swinging of expressions Updated the PDF build environment

2. Introduction

- This is functional specifications of the sample code for deserialization to be provided to users.

The supported environment is Python/TypeScript.

The supported AI models are object detection/classification.

It is assumed that FlatBuffers are used to serialize and deserialize in this environment.

3. Terms/Abbreviations

Terms/Abbreviations	Meaning
FlatBuffers	Google binary serialize format
FBS file	File which defines the data structure for FlatBuffers

4. Reference materials

- None

5. Expected use case

- Users can deserialize and use serialized inference results.
 - Users can deserialize and get inference results from existing formats by running the sample.
 - Using sample code and documentation, users can understand how to generate and execute code for deserialize against their own defined inference result format.

6. Functional overview/Algorithm

Functional overview

- Deserializes serialized inference results.

Algorithm

- Deserializes data using code generated from the FBS file.

Under what condition

- Have a Linux environment.
 - This is needed to automatically generate code for deserialization.
 - Use Docker for development and run in a container environment on Ubuntu 20.04.
- The version of the FlatBuffers-compiler used when generating code automatically is 1.11.0.
- Have the FBS file that generated the code for serializing data.
 - This is needed to automatically generate code for deserialization.
 - Have the same object definition as when you serialize it.

API

- None

Others exclusive conditions/Specifications

- None

7. User interface specifications

How to start

- None

8. API parameters in each block

- None

9. Target performances/Impact on performances

- None

10. Assumption/Restriction

- Users cannot determine whether the output of the input AI task matches the deserialization code.

(Example: When the output of object detection is entered into the classification deserialization code, no error occurs.)

11. Remarks

- None

12. Unconfirmed items

- None