



## **Class TrtInfer**

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- Defined in [File core.hpp](#)

## Inheritance Relationships

### Base Type

- `public holoscan::inference::InferBase` ([Class InferBase](#))

## Class Documentation

class TrtInfer : public holoscan::inference::[InferBase](#)

Class to execute TensorRT based inference

Public Functions

TrtInfer(const std::string &model\_path, const std::string &model\_name, int device\_id, bool enable\_fp16, bool is\_engine\_path, bool cuda\_buf\_in, bool cuda\_buf\_out)

Constructor.

~TrtInfer()

Destructor.

virtual InferStatus do\_inference(const std::vector<std::shared\_ptr<[DataBuffer](#)>> &input\_data, std::vector<std::shared\_ptr<[DataBuffer](#)>> &output\_buffer)

Does the Core inference with TRT backend.

Parameters

- **input\_data** – Input [DataBuffer](#)
- **output\_buffer** – Output [DataBuffer](#), is populated with inferred results

Returns

InferStatus

virtual std::vector<std::vector<int64\_t>> get\_input\_dims() const

Get input data dimensions to the model.

Returns

Vector of values as dimension

virtual std::vector<std::vector<int64\_t>> get\_output\_dims() const

Get output data dimensions from the model.

Returns

Vector of input dimensions. Each dimension is a vector of int64\_t corresponding to the shape of the input tensor.

virtual std::vector<holoinfer\_datatype> get\_input\_datatype() const

Get input data types from the model.

Returns

Vector of input dimensions. Each dimension is a vector of int64\_t corresponding to the shape of the input tensor.

virtual std::vector<holoinfer\_datatype> get\_output\_datatype() const

Get output data types from the model.

Returns

Vector of values as datatype per output tensor

inline virtual void cleanup()