ADIO: 數位影像技術知識圖

可以廣泛使用的Ontology

整理個人電影相關經歷

專注「Digital Imaging」

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電影知識

電影技術

電影攝影

數位影像技術

場面調度

鏡頭運動

電影表演

電影美術

電影錄音

電影理論

電影工業

電影歷史

知識	技術	具體物件
訊號處理	編碼	攝影機
感光元件	解析度	燈光
鏡頭	色彩空間	鏡頭
色彩濾鏡	伽馬曲線	影像作品
鏡頭接環		鏡頭接環

:Subject

:Property

Int
float
boolean
date
ADIO:class

Fundemental Knowledges

CameraSensor

CameraSignalProcessing

ColorFilterArray

Technologies

Codec

Resolution

ColorSpace

Gamma

Physical Objects

CinemaCamera

Movie

Lens

LensMount

Lighting
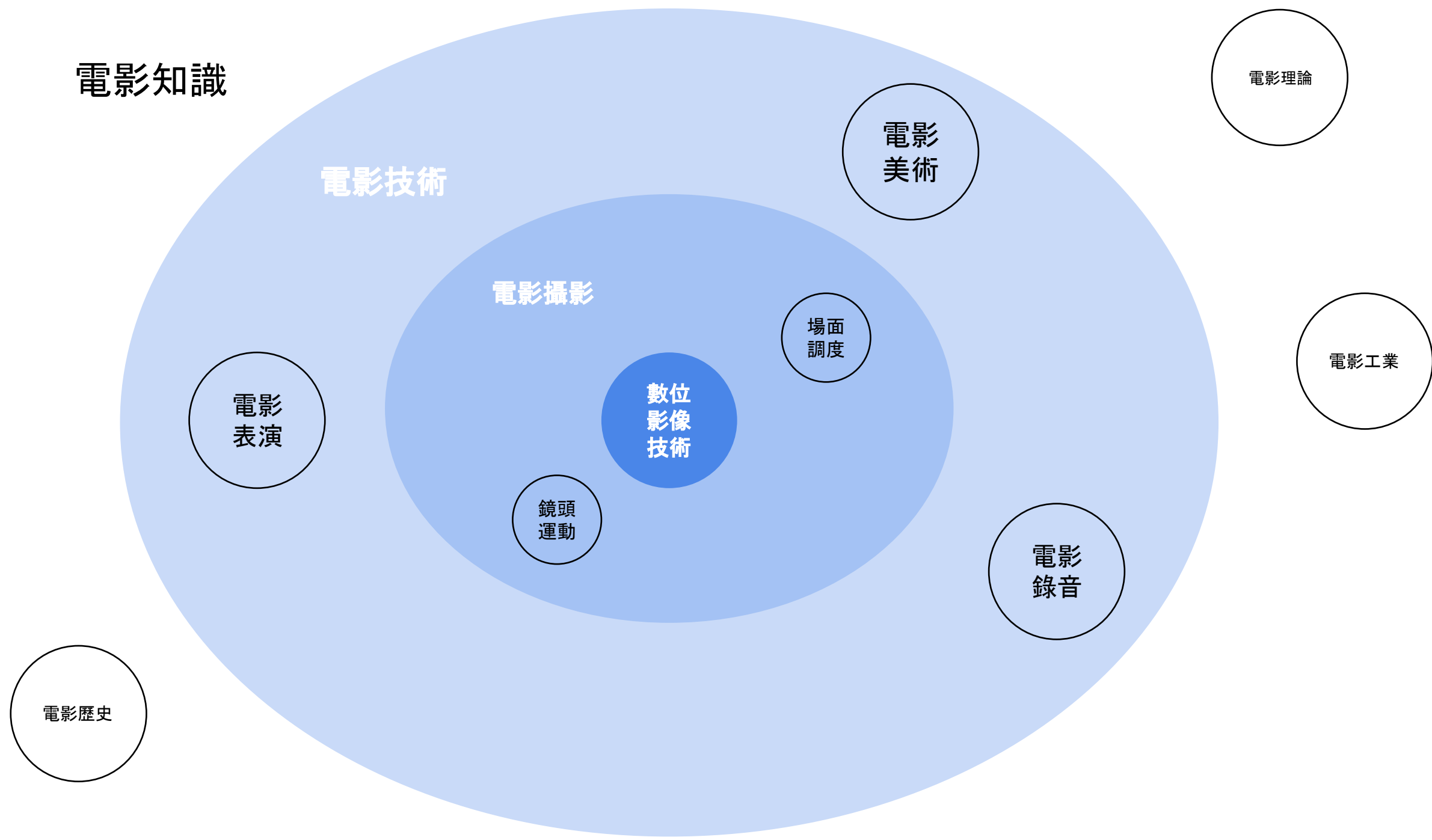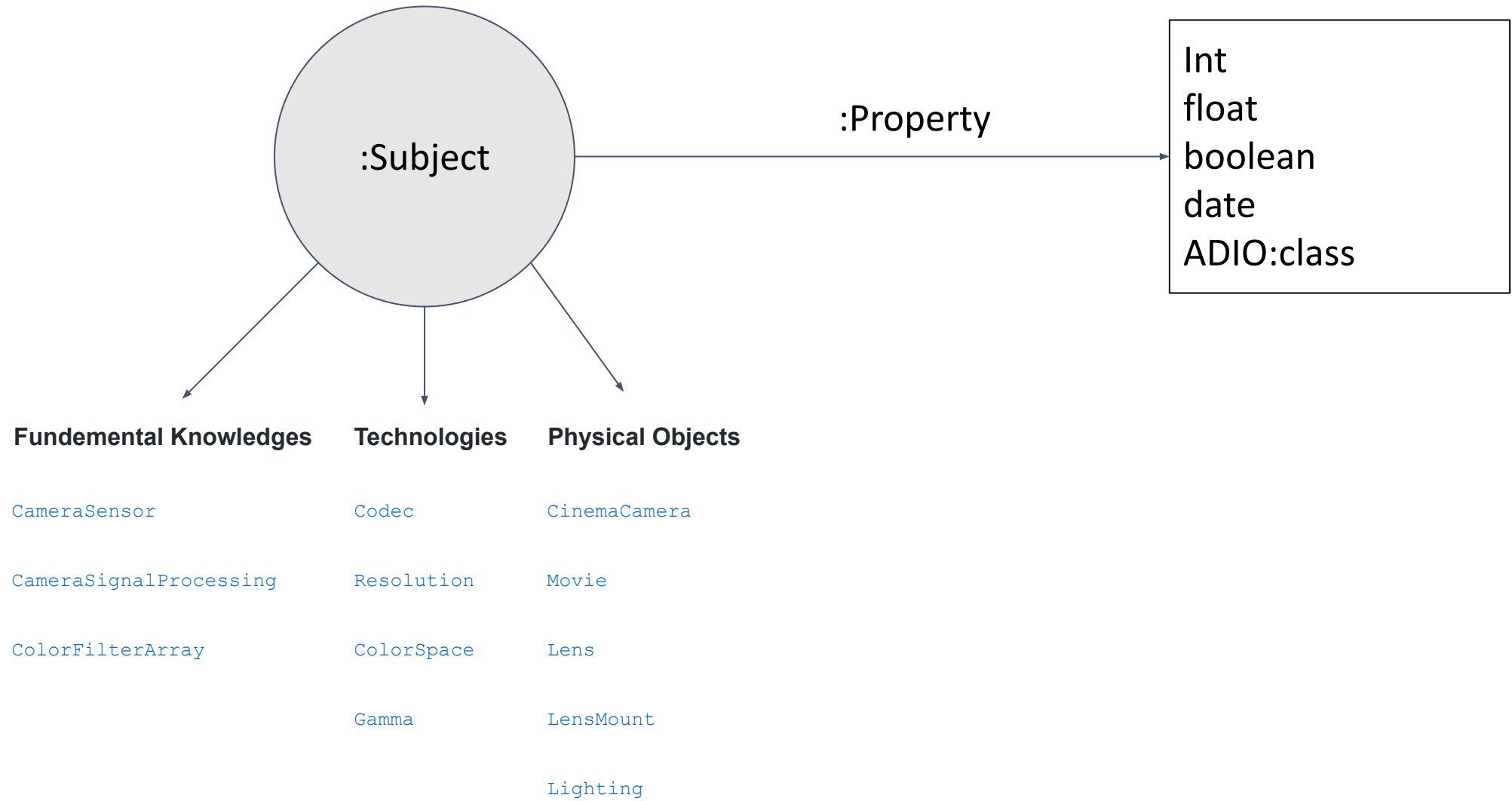
CinemaCamera

Camera used in cinema production.

Property Name	Expected Type	Description
Manufacturer	xsd:string	The company making the camera.
Model	xsd:string	The specific model of the camera.
ReleaseYear	xsd:gYear	The date on which camera is being released.
Sensor	:CameraSensor	The part of camera which transform light rays into electronic signals.
SignalProcessingType	:CameraSignalProcessing	Knowledge regarding the how camera output image signals.
MaxFramerate	xsd:int	Max possible frame per second recorded with the maxium resolution.
MaxDataRate	xsd:int	Maxium possible data rate of the image recorded.
Codec	:Codec	The method of which image is being recorded and encoded as digital files.
LensMount	:LensMount	The mount connecting cameras and lenses.
NativeISO	xsd:int	Base ISO of which the camera has maximum dynamic range.
DynamicRange	xsd:int	Range of luminance of which the camera is capable of recording.(in stops)
ColorSpace	:ColorSpace	The volumn of color of which the image is capable of displaying.
Gamma	:Gamma	The way luminance in real world converted to luminance level on the image.

SPARQL查詢

```
#Find all objects made by ARRI
PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX : <http://alexdigitalimagingontology.com/>

SELECT ?s ?m
WHERE {
  ?s :Manufacturer ?m .

  FILTER(?m="ARRI")
  }
```

s	m
<http://alexdigitalimagingontology.com/ALEVIII>	ARRI
<http://alexdigitalimagingontology.com/ALEXA_MINI>	ARRI
<http://alexdigitalimagingontology.com/M18>	ARRI
<http://alexdigitalimagingontology.com/M40>	ARRI
<http://alexdigitalimagingontology.com/PL>	ARRI

SPARQL查詢

```
#All the compatible lenses for each cinema cameras.
PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX : <http://alexdigitalimagingontology.com/>

SELECT DISTINCT ?cam ?width ?s1
WHERE {
  ?s1 a :Lens ;
   :FullFrameCompatible ?f ;
     :S35Compatible ?s35c .
  ?s2 a :CinemaCamera ;
       :Model ?cam ;
       :Sensor ?sensor .
  ?s3 a :CameraSensor ;
       :Width ?width.
  FILTER((?sensor=?s3 && ?width>=36 && ?f=true)||(?sensor=?s3 && ?width<36 && ?s35c=true))
} ORDER BY ASC (?cam)
```
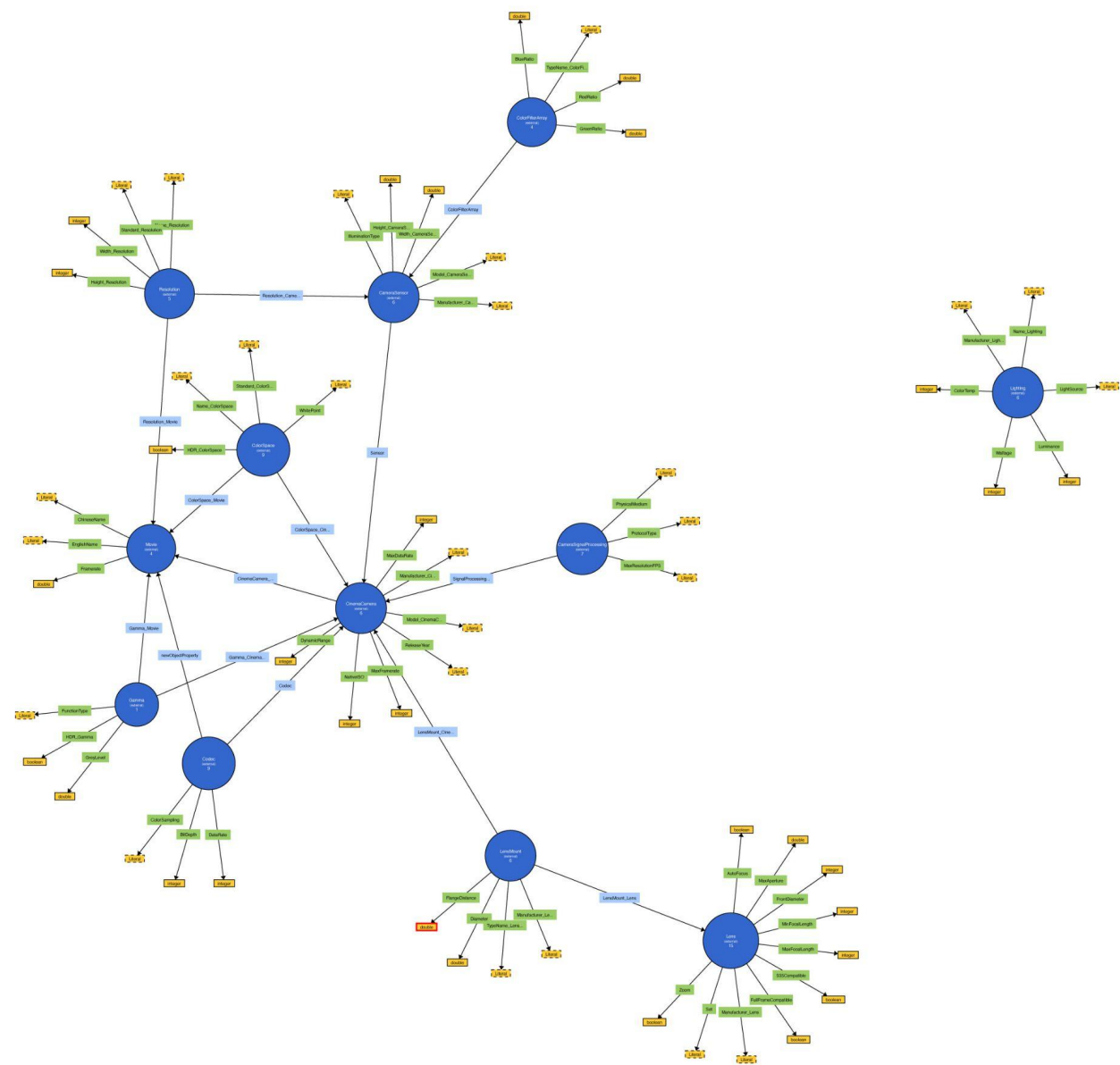
視覺呈現

External Vocabulary

xsd:int: 所有整數的參數

xsd:float: 非整數的參數

xsd:boolean: 是否具有「某項功能/特質」

xsd:string: 廠商/名字/非結構化的參數

xsd:gYear: 發佈年份