



## Input for Domain Discovery

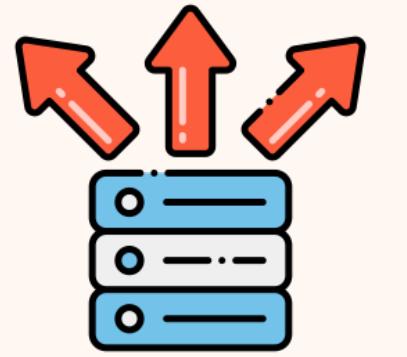
**Repository Name:** arviz,

**Repository Info:** The ArviZ repository is a comprehensive Python package designed for the exploratory analysis of Bayesian models. ...

**Parsed Semantic Features:**

```
{  
    "visualize": ["plot empirical cumulative distribution",  
    "compare ECDF against a reference CDF", "support  
    confidence band visualization"],  
    "extract data subsets": ["extract groups or subsets  
    from InferenceData objects", "support variable filtering  
    and sample reduction"],  
    "bayesian inference sampling utilities": ["initialize  
    sampling wrapper for Bayesian inference", "configure  
    optional arguments for sampling"],  
    ...  
}
```

**Task:** Based on the information above, please analyze the repository and determine its main functional areas.



## Plan Result

**<think>**

Given a comprehensive feature list, I group capabilities by responsibility: data subsetting, filtering, aggregation form DataProcessing, and format, schema conversion plus IO form DataConversion. Sampler and backend wrappers, including sampling setup and configuration, form ModelIntegration. Sampling-quality checks form StatisticalDiagnostics, while model evaluation and comparison form BayesianEvaluation. ...

**</think>**

**<action>**

```
{  
    "functional_areas": [  
        "DataProcessing", "DataConversion",  
        "ModelIntegration", "StatisticalDiagnostics",  
        "BayesianEvaluation", "Visualization",  
        "ConfigurationManagement", "UtilityFunctions"  
    ]  
}
```

**</action>**