

### ③ DataFrameExtractor

df\_methods : list

```
extract_dataframe_variables(fun_node: ast.AST, alias: str) -> list[str]
load_dataframe_dict(path: str)
track_dataframe_accesses(fun_node: ast.AST, dataframe_vars: list[str]) -> dict[str, list[str]]
track_dataframe_methods(fun_node: ast.AST, dataframe_vars: list[str]) -> dict[str, list[str]]
```

### ③ LibraryExtractor

```
extract_libraries(tree: ast.AST) -> list[dict[str, str]]
get_library_aliases(libraries: list[dict[str, str]]) -> dict[str, str]
get_library_of_node(node: ast.AST, aliases: dict[str, str]) -> str
```

### ③ ModelExtractor

model\_dict : NoneType  
models\_path : str  
tensor\_operations\_dict : NoneType  
tensors\_path : str

```
check_model_method(model: str, libraries: list[str]) -> bool
load_model_dict() -> dict[str, list]
load_model_methods() -> list[str]
load_tensor_operations_dict() -> dict[str, list]
```

### ③ VariableExtractor

```
extract_variable_definitions(fun_node: ast.AST) -> dict[str, ast.Assign]
track_variable_usage(fun_node: ast.AST) -> dict[str, list[ast.Name]]
```