Capsule



Capsule is a Python library for machine learning tasks, providing a unified interface for classification and regression models. The source code is organized in the src/capsule/ directory, with modules for base functionality, classification, and regression.

Features

- · Unified API for classification and regression
- · Extensible base classes
- · Easy integration with other Python ML libraries

Installation

Install from GitHub

```
pip install git+https://github.com/vitorbezzan/capsule.git
```

Development Setup

To set up Capsule for development, follow these detailed steps:

1. Clone the Repository

```
git clone https://github.com/<your-username>/capsule.git
cd capsule
```

2. Create a Virtual Environment (Recommended)

```
# Using venv
python -m venv venv
source venv/bin/activate # On Windows: venv\Scripts\activate

# Or using conda
conda create -n capsule python=3.8+
conda activate capsule
```

3. Install in Development Mode

This project uses pyproject.toml for dependency management. Install the package in editable mode with all dependencies:

```
# Install the package in development mode
pip install -e .

# Install with development dependencies (if specified in pyproject.toml)
pip install -e ".[dev]"
```

4. Verify Installation

```
# Run tests to verify everything is working
pytest
# Or run tests with coverage
pytest --cov=capsule
```

5. Development Workflow

- The source code is located in src/capsule/
- Tests are in the tests/ directory
- Documentation files are in docs/
- Use pytest to run tests during development
- The project configuration is managed through pyproject.toml

License

See LICENSE for details.