

Simulation + AI Course Setup Guide (Python 3.11.9)

Step-by-step instructions for students to set up the environment.

1. Clone the repository:

```
git clone https://github.com/YOURUSERNAME/simulation-ai-course.git
cd simulation-ai-course
```

2. Create virtual environment (Python 3.11.9):

Mac/Linux:

```
python3.11 -m venv simai_env
source simai_env/bin/activate
```

Windows (PowerShell):

```
python -m venv simai_env
.\simai_env\Scripts\activate
```

3. Install dependencies:

```
pip install --upgrade pip setuptools wheel
pip install -r requirements.txt
```

4. Open JupyterLab:

```
jupyter lab
```

Then open the notebooks in the 'notebooks/' folder.

Troubleshooting:

1. 'pip' not recognized:

Use: `python -m pip install -r requirements.txt`

2. Virtual environment doesn't activate:

On Windows PowerShell run:

```
Set-ExecutionPolicy -Scope CurrentUser -ExecutionPolicy RemoteSigned
```

3. 'jupyter' not found:

Install explicitly: `pip install jupyterlab ipykernel`

4. Wrong Python version:

Check with: `python --version` (must be 3.11.x)

5. Packages fail to build:

```
pip install --upgrade pip setuptools wheel
```

6. Still stuck?:

Delete venv and recreate it:

```
rm -r simai_env (Mac/Linux)
```

```
rmdir /s simai_env (Windows PowerShell)
```