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PiKAN repo documentation

Modules

1. Data
2. Features
3. KAN\_lib
4. Models
5. Pipelines
6. Plotting
7. Post\_Process
8. PreProcess
9. Train\_utils

Module Structures

1. Data
   1. Old\_data
   2. RANS
   3. RANS\_Dicts
   4. Boundary\_conditions.py
   5. Clean\_rans\_raw\_data.py
2. Features
   1. Calculate\_gradients\_rans.py
   2. Rans\_Feature\_engineering\_no\_grads.py
   3. RANS\_Feature\_engineering\_grads.py
3. KAN\_lib  
   \*see full documentation for more info
4. Models
   1. FCN.py
   2. KAN.py
5. Pipelines
   1. All
      1. Configs
      2. Outputs
      3. Simulation.py
      4. Pipeline\_All.py
   2. RST
      1. Configs
      2. Outputs
      3. Simulation.py
      4. Pipeline\_RST.py
   3. Temp\_press
      1. Configs
      2. Ouptuts
      3. Simulation.py
      4. Pipeline\_TP.py
6. Plotting
   1. Plot\_single\_figure.py
   2. Plot\_kde.py
   3. Plot\_results.py
   4. Plot\_losses.py
7. Post\_process
   1. Make\_preds.py
   2. Make\_accuracies.py
8. PreProcess
   1. Make\_norms.py
   2. Load\_data.py
9. Train\_utils
   1. Calc\_data\_phys\_const\_losses.py
   2. Initialize\_crit\_sched\_opt.py
   3. Loss\_name\_mapping.py
   4. Loss\_teracker.py
   5. Loss\_wrapper.py
   6. Make\_autograd\_losses.py
   7. Make\_loss\_weights.py
   8. Scale\_losses\_by\_weights.py

Workflow

1. All model trainings are run within the