User Space Driver - Class Diagram

Controller

- □ int   riverState;

- ● int   getRiverState();
- ● int   reconfigureFPGA();
- ● int   loadConfiguration();
- ● int   setInputs();
- ● void   riverMonitoring();

Driver

- ○ void*   base_address;
- ○ unsigned   int   uio_size;
- ○ unsigned   int*   Inputs;
- ○ unsigned   int*   Output;
- ○ unsigned   int*   layerWeigth;
- ○ unsigned   int*   layerBias;
- ○ unsigned   int*   outputWeigth;
- ○ unsigned   int*   outputBias;
- ○ unsigned   int*   input_hw;
- ○ unsigned   int*   output_hw;

- ● int   getAddr();
- ● int   mapPorts();
- ● unsigned   int*   assignToPhysical();
- ● DriverN();
- ● ~Driver();

ANNService

- ● int   initModule();
- ● int   startOP();
- ● int   loadWeigths();
- ● int   setInputs();
- ● int   getResult();
- ● ANN();
- ● ~ANN();

ANN_DAO

- □ void*   persistenceDependency;

- ● ANN_DAO(Persistence);
- ● ~ANN_DAO();
- ● int*   loadData();
- ● int   storeData();