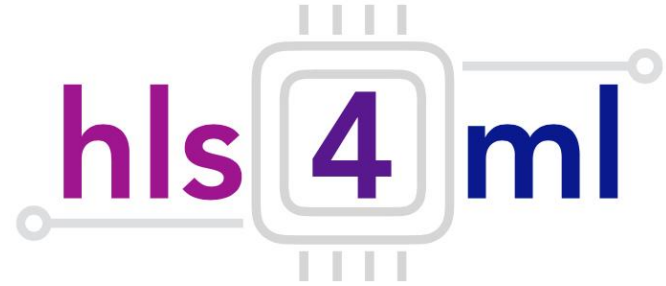


hls4ml - Jen, Dejan, Petr, Adrian, Hasib, Sioni, Vladimir

- Faster Inference on FPGAs
- Currently supporting FC layers
- This hackathon: **Convolutional layers**
 - Algorithm implemented
 - Needs to be optimized for HLS - Petr made progress
 - Develop models and test them - Jen, Adrian
 - Investigate quantization (binary/ternary)
- Other stuff:
 - Address several smaller issues
 - Implement fused Batch norm and matrix multiplication - Dejan



hls4ml - Jen, Dejan, Petr, Adrian, Hasib, Sioni, Vladimir

Goal: Improve support for Conv1D/2D layers in hls4ml

- As well as smaller improvements

Implementation ready

- Support both image data formats (channels first and channels last)
- Investigating HLS improvements (array partitioning etc)

Fusion of dense and batch normalization layers

- Fusion of convolution and batch normalization is WIP

Binary/Ternary Conv2D

- Models trained, comparing accuracy of Keras vs HLS

