Neural Net Implemntation on FPGA's: Goals

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1. Design and implement hardware optimized inference on an FPGA.
2. Benchmark performance of FPGA's against GPU's and CPU's.
3. Build an "analog" front end.
   (a) Radar - Gender id, people in room
   (b) Style Transfer - live feed
   (c) Audio - Frank's speech denoising
   (d) Video - lipnet, live blackboard transcription
   (e) Image - Handwriting transcription
   (f) Lidar - Car or pedestrian detection
   (g) Wireless - Signal classification, smart jamming?