

Checkoff:**Commitment:**

- Demonstrate the input and output data via UART and appropriate storing of data into (and withdrawal of data) from BRAM/DRAM
- Demonstrate encryption of data in hardware with GLWE
- Demonstrate decryption of data in hardware with GLWE
- Demonstrate a simple linear using system

Goal:

- Add in and demonstrate bootstrapping modules
- Conduct inference with a quantized neural network [replaces the linear regression module] in software
- Characterize and demonstrate the speed of the system and compare to unoptimized CPU implementation

Stretch Goal:

- Demonstrate full system working using two separate FPGAs (one for encryption/decryption and one for neural network computation)
- Get the speed of the design to be two times faster than numpy's implementation