Cadence:

Read Professor’s publications

Pulse coded neural networks, winner take all neural networks, or other neural network you are interested in.

Cadence + Python/MATLAB

For example:

Build MAC circuit with Cadence and implement backpropagation using Python or MATLAB

Verilog + FPGA

You can build a simple neural network using Verilog and verify it with FPGA

Please see the example below:

https://www.youtube.com/watch?v=a2wOjxRf\_xg&t=397s