EEC 511 Image Processing in VLSI

Mini Project 1

Study the image (Project 1) particularly the lady in the foreground. The image was captured while she was walking, resulting in motion blurring artefacts.

- 1. Design the algorithm in MATLAB to restore this image by reducing blurring artefacts. Show all important mathematical formulations and summarise the algorithm using flowchart. Attach the m-file in the appendix.
- 2. Implement this algorithm in FPGA. Explain and discuss the RTL codes in your implementation. Attach the corresponding Verilog codes in the appendix.
- 3. Compare the results from MATLAB and FPGA simulations.