

Accelerated Implementation for Contact-level human hand-object surfaces

- Understand provided code in MATLAB and Python about mapping of human hand-object contact surfaces in object manipulation experiments
- Implement the algorithm in C/C++ (HLS/Vitis)
- Optimized implemented IP wrt. HW resource and memory access
- Evaluate the outcome with the baseline in MATLAB (on a PC)

Required Knowledge: Linear Algebra, Computer Architecture, Computer Algebra, Algorithm design

Required Skills: Vivado/Vitis HLS (preferably), Programming, C/C++, Python (preferably), MATLAB (preferably)

Languages: English

