Our company is growing rapidly and is looking to fill the role of FPGA. Please review the list of responsibilities and qualifications. While this is our ideal list, we will consider candidates that do not necessarily have all of the qualifications, but have sufficient experience and talent.

Responsibilities for FPGA

- New Design responsibilities will include design specification, coding, detailed circuit analysis, simulation, FPGA builds/ optimizations, design verification and regression testing
- Map the IC's RTL to FPGA resources, and bridge to any required real-world interfaces, using off-the-shelf interface cards, or by defining custom solutions to be built
- Simulate the functionality/connectivity of the prototype system, with appropriate level of modelling
- Bring up the system, debug any logical or electrical interface issues between boards/components
- Build in system level self-test to ensure platform is reliable for its users
- Use video and other test equipment HDMI/MIPI protocol checkers to test standards compliance
- Stress-test the prototype IC's design by applying a large volume of real-world stimulus, with the goal of finding anomalies, instability or repeatability issues
- Work closely with relevant design, DV and software engineers to debug anomalies seen in testing
- Objectively measure video quality by analysing data offline in Matlab and/or in real-time on FPGA
- Subjectively assess video processing quality of prototype and competitors' solutions by selecting challenging/worst-case video content/patterns to stress the algorithms under development

- Experience working with EDA simulation and synthesis tools such as Quartus, ModelSim
- At least 5 year experience in Verilog/VHDL FPGA core design
- Intimate knowledge of scripting language, more specifically Perl and Tcl in the context of test automation
- Excellent knowledge of simulation (Modelsim) and synthesis tools (Altera and Xilinx)
- Working knowledge of advanced verification methodologies (SystemVerilog, SystemC) (an asset)
- Working knowledge of Agile development methodology (an asset)