

Dear Hiring Manager,

My name is Sheik Dhawood Ashfaq Asick Ali, and I am currently pursuing a Masters in Computer Engineering at the University of Southern California, specializing in Hardware Design, particularly in ASIC tape-out and ML Accelerators.

Through my coursework and projects, I have gained comprehensive expertise in hardware design, with a particular emphasis on low-power techniques and system-on-chip (SoC) architectures. For instance, in a recent ASIC tape-out project, I led a team to design and implement a Smith-Waterman DNA sequencing accelerator using SystemVerilog, achieving a 500x speedup for 1,000-length sequences. This experience enhanced my proficiency in RTL design, verification, synthesis, and physical implementation.

Additionally, I possess strong experience in mapping ASIC RTL to FPGA platforms, as demonstrated by my work on PCIe protocol implementation and AXI4 multi-initiator/responder bus design. My technical skill set includes programming in Python and C++, low-power design methodologies, and familiarity with lab tools like oscilloscopes and logic analyzers.

I am drawn to your teams focus on pushing the boundaries of RISC-V based application processors, and I am confident that my background aligns well with the responsibilities outlined for this role. I look forward to the opportunity to contribute to innovative projects and collaborate with industry leaders.

Please find my resume attached for your review. I would appreciate the opportunity to discuss how my skills and experiences can contribute to your team. Thank you for your time, and I look forward to hearing from you.

Best Regards

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