DIGITAL VLSI CAMPUS PLACEMENT GUIDE

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STEP 01: COVER BASICS

- Digital Electronics (GATE Level): logic gates, K-Maps, combinational and sequential circuits
- <u>Basic Programming</u>: loops, sorting, and searching algorithms in C

STEP 02: IMPORTANT COURSES

- Digital IC Design by Prof Janakiraman (IITM)
  - Make short notes
  - complete assignments
- Hardware modeling using Verilog by Prof Indranil Sengupta (IIT KGP).
  - Make notes
  - PRACTICE ON HDLbits (for solutions click here)

STEP 03: IMPORTANT TOPICS

- CDC and synchronization
  - READ Sunburst paper
- FIFO
  - READ Sunburst paper
- A helpful link
- Physical Design Flow
  - You can go through a Udemy course- VSD - Physical Design Flow or can read about it from internet

STEP 03: IMPORTANT TOPICS

- CAO (any one source)
  - High Performance Computer Architecture (HPCA) by Udacity (Optional)
  - Patterson Hennessy-Computer Organization RISC-V Ed (Cover chapter – 4 & 5)
  - Important topics : Processor design, Pipelining, Hazards, Cache and Virtual Memory
  - Processor System Design by KV Sir (Multi-cycle CPU, Single Cycle CPU, Pipelined CPU)

- Static Timing Analysis
  - Link
  - Read it from Ch 10 - Weste & Harris

- ASIC Design Flow
  - Link
  - Read it from Ch 14 - Weste & Harris

STEP 04: PRACTICE

- Complete Digi_qs.pdf AT LEAST 2 TIMES. Make a note of your mistakes.
- Practice Verilog and complete HDLbits at least once.
- Revise Digital IC Design notes regularly.
- Solve FIFO QnA pdf for better understanding of FIFO.
- Complete puzzles.

STEP 05: INTERVIEW

- DO NOT LIE IN YOUR CV.
- Do not pretend to know an answer when you don't, i.e., don't act oversmart.
- THINK LOUDLY. Let the interviewer know your thought process.
- Every company has its own interview patterns; therefore, go through the interview experiences of respective companies before an interview.
- Stay calm and be confident in your preparation.

THANK YOU

- Stay calm and wait for your turn.
- Best of luck!