Proforma

Companies open to your department

Company :	KLA Tencor Software India Pvt Ltd
Company Name :	KLA Tencor Software India Pvt Ltd
Nature Of Business :	Product Engineering
Designation :	CUDA Development Engineer
Tentative Job Location :	Chennai

CUDA Development Engineering â€“ AI/ML Group

KLA, Chennai, India

KLA Overview:

Calling the adventurers ready to join a company that's pushing the limits of nanotechnology to keep the digital revolution rolling. At KLA, we're making technology advancements that are biggerâ€”and tinierâ€”than the world has ever seen.

Who are we? We research, develop, and manufacture the world's most advanced inspection and measurement equipment for the semiconductor and nanoelectronics industries. We enable the digital age by pushing the boundaries of technology, creating tools capable of finding defects smaller than a wavelength of visible light. We create smarter processes so that technology leaders can manufacture high-performance chipsâ€”the kind in that phone in your pocket, the tablet on your desk and nearly every electronic device you ownâ€”faster and better. We're passionate about creating solutions that drive progress and help people do what wouldn't be possible without us. The future is calling. Will you answer?

Key Responsibilities:

Description :

- As part of KLA algorithms team, the job entails understanding core algorithms that have to expressed in various parallel computing constructs particularly HPC accelerators such as GPUs.
- The first step in optimizing will be to theoretically model break-down of our AI algorithms and model it in terms of available bandwidth, computational FLOPS etc. The implementation steps will include CUDA level programming along with performance tuning to ensure that we can come close to achieving the theoretical model.
- The developer will be exposed to a variety of image processing, signal processing and deep learning loads that have to be optimized. A complimentary stage of optimization includes exploring existing libraries and programming in higher level constructs such C++ Parallel programming.
- While the initial focus of the team will be on NVIDIA GPUs, the R&D team will also be looking at other GPU accelerators from other vendors as well as FPGA acceleration. You will collaborate with peer researchers in parallel computing areas and with algorithm teams in product groups.

Minimum Qualifications

- New college graduates in any of the following degree: Ph.D., Dual Degree, MS, M.Tech or B.Tech. (Candidates from EE, CS and Mathematics background would be preferred)
- A researcher who has a strong foundation in computer architecture, and in particular with a focus on high performance parallel processing at the device level (GPUs or CPUs/SIMD or FPGAs).
- The researcher should have a strong mental model of computational loads and mapping different algorithms to parallel architectures.
- Proficient in programming skills in C/Modern C++ and Python.
- Experience in analyzing and tuning applications using profiling tools such as NSIGHT or VTUNES.
- Good understanding and exposure to the Linux operating system at the user level.
- Exposure to multiprocessor and multithreading concepts
- Some familiarity with GPU programming such as CUDA, OpenCL or SYCL.

The position also requires a person with significant communication, initiative and the ability to navigate from relatively high-level requirements to low level computational models.

Eligibilty :

Department	BT	BS	MT	DoubleMajor	dual	dualB	dualC	Mdes	MBA	Phd	MSc	MSR
AE	N	-	N	N	N	N	N	-	-	N	-	N
BSBE	N	-	N	N	N	N	N	-	-	N	-	N
CE	N	-	N	N	N	N	N	-	-	N	-	N
CHE	N	-	N	N	N	N	N	-	-	N	-	N
CSE	Y	-	Y	Y	Y	Y	Y	-	-	Y	-	Y
EE	Y	-	Y	Y	Y	Y	Y	-	-	Y	-	Y
ES	-	N	N	-	N	-	N	-	-	N	-	-
ME	Y	-	Y	Y	Y	Y	Y	-	-	Y	-	Y
MSE	N	-	N	N	N	N	N	-	-	N	-	N
PHY	-	N	-	N	N	N	N	-	-	N	N	-
CHM	-	N	-	N	N	N	N	-	-	N	N	-
MTH	-	Y	-	Y	Y	Y	Y	-	-	Y	Y	-
ECO	-	N	-	N	N	N	N	-	-	N	-	-

DES	-	-	-	-	-	-	N	N	-	N	-	-
IME	-	-	N	-	-	N	N	-	N	N	-	-
CGS	-	-	-	-	-	-	-	-	-	N	-	N
HSS	-	-	-	-	-	-	-	-	-	N	-	-
EEM	-	-	N	-	-	N	-	-	-	N	-	-
MSP	-	-	N	-	-	-	-	-	-	N	-	-
NET	-	-	N	-	-	N	-	-	-	N	-	-
PSE	-	-	N	-	-	N	-	-	-	N	-	N
Stats	-	-	-	-	-	-	-	-	-	N	N	-

Cost to Company :

Bachelors: INR 2124542 + Hiring Bonus INR 200000

Masters/Dual: INR 2341728 + Hiring Bonus INR 200000

PhD: INR 3075284 + Hiring Bonus INR 200000

Heads	Btech	Masters/DD	PhD
Basic	1700000	1800000	2200000
Bonus	170000	180000	330000
LTI	122916	218833	368583
Other Benefits	131626	142895	176701
Total CTC	2124542	2341728	3075284
One time Hiring Bonus	200000	200000	200000

Package Details :

Total LTI:

Bachelors: INR 368750Â (Year 1 is included in CTC, Remaining 2 installments will be paid in year 2 and 3)

Masters/Dual: INR 656500Â (Year 1 is included in CTC, Remaining 2 installments will be paid in year 2 and 3)

PhD: INR 1105750Â (Year 1 is included in CTC, Remaining 2 installments will be paid in year 2 and 3)

Bond : False

Medical Requirements : No

Resume Shortlist : False

Aptitude Test: False

Group Discussion: False

Technical Test: True

Technical Test Duration: 60 Mins

Technical Interview: True

Technical Interview Duration: 60 Mins

Number of Techincal Interview Rounds: 2

HR Interview: True

HR Interview Duration: 30 Mins