**KLA Tencor Software India Pvt Ltd** Company: **Company KLA Tencor Software India Pvt Ltd** Name:

**Nature Of** 

**Product Engineering** 

Designation Algorithm Engineer (AI/ML) - Advanced Computing Labs

Tentative Job Location:

**Business:** 

KLA Advanced Computing Labs (IITM Research Park)

Algorithm Development Engineering - AI/ML Group

KLA Advanced Computing Labs @ IIT, Madras Research Park

## **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 bigger—and tinier—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 chips—the kind in that phone in your pocket, the tablet on your desk and nearly every electronic device you own—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?

#### **KLA Advanced Computing Labs, India:**

KLA advanced computing Labs' mission in India is to deliver advanced parallel computing research and software architectures for AI + HPC + Cloud solutions to accelerate KLA's product performance. This team explores high-risk approaches, pioneering technologies, and novel methods to accelerate KLA's algorithms and contribute to KLA's HPC technology roadmap. We engage leading thinkers in academia, industry and KLA's business units to create innovative parallel computing methods to enable KLA's business growth.

#### **Key Responsibilities:**

KLA is seeking applications for an Algorithm engineer in EBEAM division for developing next generation technologies in yield management for Semi-Conductor industry. This position involves developing advanced Image Processing and Machine Vision algorithms for the wafer Inspection, Review and Metrology products. We are one of the pioneering companies in the Semi-Conductor industry to use Deep Learning algorithms for defect Description : detection and classification. In addition, we are actively exploring using Generative models (GAN) for SEM image simulation and image quality enhancement.

- This position involves developing advanced image processing algorithms for the wafer inspection and review.
- Designs and develops cutting edge image processing and machine learning algorithms.
- Implement system level solutions to push the limits of sensitivity on semiconductor inspection & review systems.
- Designs and implementations are always constrained to operate with the boundaries of robustness and stability.
- Real time requirements pose additional challenges and works extensively on providing solutions to live customer problems in the field.
- This position is unique as it interfaces with several system level groups Optics, mechanics, sensors, and applications among others.
- The opportunities are boundless in the technical areas as we are constantly pushing the envelope of leading-edge technologies in algorithms and image computers.
- System level solutions for these complex automated inspection platforms. We are constantly innovating and releasing products every few months

### **Preferred Qualifications**

- New college graduates in any of the following degree: Ph.D., Dual Degree, Masters, (Candidates from EE, CS and Mathematics background would be preferred)
- The ideal candidate will have a working knowledge of Machine Vision.
- Knowledge of Deep Learning with working experience in Tensor Flow, Theano, PyTorch etc.
- Ability to formulate problems into mathematical equations.
- Proficiency in computational methods, C++, and object-oriented design.
- Team player with good written and verbal communication skills.

	Program	AE BSBE	CE CHE	CSE	EE	ES M	E MSI	ЕРНҮ	СНМ	<b>МТН</b>	ECC	DES	IME	CGS	HSS	EEM	MSP	NET	PSE	State
	BT	No No	No No	No	No	No	No No													
	BS					No		No	No	No	No									
	MT	No No	No No	Yes	Yes	No No	No No						No			No	No	No	No	
	DoubleMajor	No No	No No	No	No	No	No No	No	No	No	No									
	dual	No No	No No	Yes	Yes	No No	No No	No	No	Yes	No									
Eligibilty:	dualB	No No	No No	Yes	Yes	No	No No	No	No	Yes	No		No			No		No	No	
Liigibiity.	dualC	No No	No No	Yes	Ves	No No	No.	Nο	Nο	Yes	Nο	Nο	Nο							

Mdes											No								
MBA												No							
Phd	No No	No No	Yes	Yes I	No No	No	No	No	Yes	No									
MSc							No	No	Yes										No
MSR	No No	No No	Yes	Yes -	- No	No							No					No	

Cost to Company:

Masters: INR 2341728 + Hiring Bonus INR 200000

PhD: INR 3075284 + Hiring Bonus INR 200000

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

# Package Details :

### **Total LTI Value:**

Master's/Dual: INR 656500 (Paid in 3 installments. Year 1 is included in above CTC. Remaining will be paid in Year 2 & 3)

PhD: INR 1105750 (Paid in 3 installments. Year 1 is included in above CTC. Remaining will be paid in Year 2 & 3)

Bond : CPI CutOff : Medical	False 0.0
Requirments :	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
Additional Information:	1