



# DEEP LEARNING COURSE SYLLABUS



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## Deep Learning Course Syllabus

SLA is one of its kind Institute which not only equips you in technology skills but will train you for free in Aptitude skills, Soft Skills, Mock Interviews, Interview Skills, Work ethics and Corporate Values that you need to know to get into IT Industry. Our training is given by expert real time development experienced trainers and we enable each and every student of ours to do their own real time projects by the end of the program.

We do not buy you a job by bribing companies to secure a place in IT, instead we equip you with the skills needed to get employed in IT and will support you with unlimited number of relevant interview opportunities so that your career in IT becomes assured. Our support will be there until you get placed in an IT Company as that's our mission too.

If you want to just have an IT certification, you can do your course anywhere. If you aspire to get into an IT Job, then you should choose SLA. With SLA, your IT dream will definitely come into reality.

Please go through the long list of our student reviews / offer letters @ [www.joinsla.com](http://www.joinsla.com) to get to know more about us.

### Convolutional Neural Networks

- ❖ Invariance, stability.
- ❖ Variability models (deformation model, stochastic model).
- ❖ Scattering networks
- ❖ Group Formalism
- ❖ Supervised Learning: classification.
- ❖ Properties of CNN representations: invertibility, stability, invariance.
- ❖ covariance/invariance: capsules and related models.
- ❖ Connections with other models: dictionary learning, LISTA.
- ❖ Other tasks: localization, regression.
- ❖ Embeddings (DrLim), inverse problems
- ❖ Extensions to non-euclidean domains
- ❖ Dynamical systems: RNNs.
- ❖ Guest Lecture

## Deep Unsupervised Learning

- ❖ Autoencoders (standard, denoising, contractive, etc etc)
- ❖ Variational Autoencoders
- ❖ Adversarial Generative Networks
- ❖ Maximum Entropy Distributions

## Miscellaneous Topics

- ❖ Non-convex optimization for deep networks
- ❖ Stochastic Optimization
- ❖ Attention and Memory Models
- ❖ Open Problems

Are you happy with our course curriculum? Then why you delay? Take your mobile phone and ring us quickly on +91 88707 67784.