RADHIT DEDANIA
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Indian Institute of Technology Kanpur, India
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My research interests are Artificial Intelligence, Algorithms and Computer Architecture. I want to pursue research in these fields in future.

Education

Matriculation	2012	SN Kansagra School	92.57%
Intermediate	2014	D.A.V Public School	93.20%
BTech	Present	Indian Institute of Technology, Kanpur	9.22/10

Course details

Semester	Total Credits	Highlights
Jan 2016-Apr 2016	54	ESC-101A
Jul 2016-Dec 2016	57	ESO-207A
Jul 2017-Dec 2017	65	CS-345A
Jul 2017-Dec 2017	65	CS-771A

Skills

Programming Languages : C, C++, Java, Python, Verilog-A
Platforms / Tools : Linux, Windows, Matlab, GNU Octave, MicroCap, Latex, AutoCad, SolidWorks

Projects

1. Robust Feature Extraction Using Deep Stacked Autoencoder (SURGE-2017) (Prof. Nishchal Kumar Verma (IITK) $\parallel$ $May2017 - Present$)

   Aimed at extracting non-redundant, uncorrelated and well informative features from an input Lung Cancer Dataset and deriving the right choice of parameter initialization values in this problem of non-convex optimization. Obtained pen-stroke like features when implemented on MNIST database of hand-written digits, using suitable data pre-processing, greedy layer-wise training and multiple fine-tunings of the stacked autoencoder consisting of three different cascaded autoencoder. Verified the superior quality of feature extraction of stacked autoencoder over an autoencoder(three layered deep neural network).

2. Negative Capacitance FET Model 1.0.0 implementation in MATLAB (RTE-2017) (Prof. Shaloo Rakheja (NYU,USA) $\parallel$ $June2017 - July2017$)

   Gained an in-depth knowledge of nanoscale MOSFETS and the de-

vice physics involved with it on nanoHUB-U. Understood the compact model on NCFETs involving LK equations and variation of different device parameters. Extensively studied Verilog-A and translated the model implementation available in it to MATLAB. Simulated the created MATLAB code for the model and compared the results with available experimental data.

Awards and achievements

- Secured an All India Rank of 990 among 1.5 lakh candidates who appeared for JEE Advanced 2015, conducted by IITs
- Felicitated with Academic Excellence Award(awarded to Top 10 % of a batch of 850 students) at IIT Kanpur for the year 2015-2016
- Placed on Honor Roll of SN Kansagra School for excellent academic performance in the year 2011-2012

Hobbies

- Sports: Cricket, Chess, Football
- Music: Violin
- Cartoons: Anime