

ABOUT IIT PATNA

Indian Institute of Technology Patna is an autonomous institute of education and research in science, engineering and technology located in Bihta, 35 km from Patna. As of today, IIT Patna has 10 academic departments that offer B.Tech, M.Tech and PhD programmes. The faculties of this institute come with academic and research training from various institutes of excellence within the country and abroad. The recent publication records of the faculty with several practical constraints appear to be outstanding.



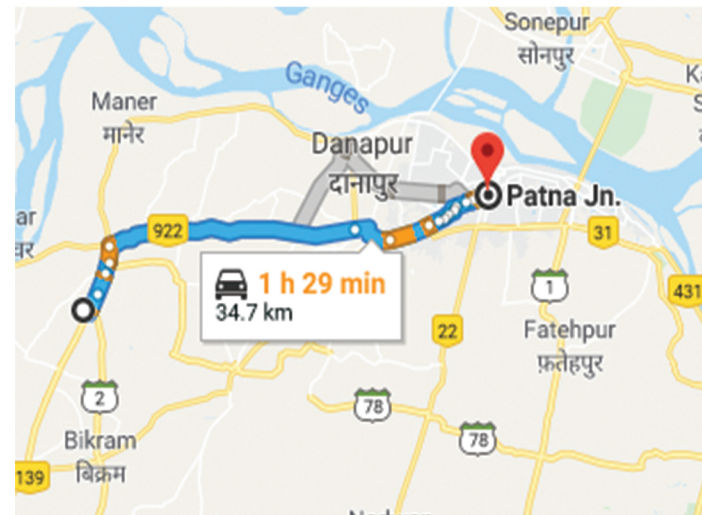
It includes many reputed national and international journals. Research activity in IIT Patna has been published in high quality and peer-reviewed national and international journals. Please browse individual faculty member web-page for more information. Faculty members of IIT Patna have been also participating in national and international conferences of repute.



COURSE COORDINATORS:

Dr. Arijit Mondal/ Dr A Maiti/ Dr J Mathew
Department of Computer Science and Engineering
Indian Institute of Technology, Patna Amhara Road,
Bihta, Pin: 801106, Bihar Email: {arijit, abyaym, jim-
son}@iitp.ac.in (Ph: 0612-3028161)

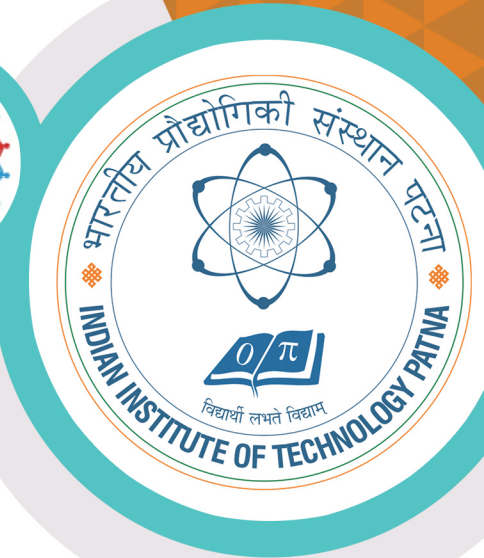
DIRECTION



TRAVEL : REACHING IITP

By Rail: IIT Patna Campus is about 35kms from Patna Junction, 24kms from Danapur Station and 38kms from Rajendra Nagar Terminal. You can find direct trains to any one of these stations from all parts of the country such as Delhi, Mumbai, Kolkata, Chennai, Hyderabad, Bangalore, Lucknow, Kanpur, Guwahati, Puri, and Vasco-de-Gamma among many others.

IIT PATNA



CERTIFICATE COURSE ON MACHINE LEARNING AND DEEP LEARNING: ISSUES, INNOVATIONS AND INTERPLAYS

DECEMBER 9-11, 2018

DEPARTMENT OF COMPUTER SCIENCE
AND ENGINEERING, INDIAN INSTITUTE OF
TECHNOLOGY, PATNA BIHTA, BIHAR, INDIA

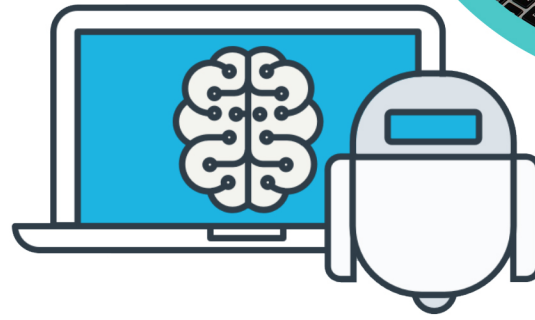
Registration Deadline: Nov 15, 2018.

ABOUT THE COURSE

Machine learning, deep learning, and data mining are concerned with the automated analysis of large-scale data by computer, in order to extract the useful knowledge hidden in it. Using state-of-the-art artificial intelligence methods, this technology builds computer systems capable of learning from past experience, allowing them to adapt to new tasks, predict future developments and provide intelligent decision support.



This Faculty Development programme is aimed at giving Faculty, Research Scholars and Students a solid grounding in machine learning, data mining and hands on training using state of the art tools, and will equip participant with the skills necessary to apply these tools and techniques to solving complex scientific and business problems. The specific topics include: Introduction to data science, big data, Linear regression Classification, Logistic regression, Knearest neighbour Support Vector Machines(SVM) Tree based methods, Principal component analysis(PCA), Neural network, back propagation D e e p neural network, optimization, momentum, Convolutional Neural network Applications of Deep Learning. This course is organized under Technical Education Quality Improvement Programme (TEQIP) and Centre for Continuing Education Programme (CEP), IIT Patna.



REGISTRATION PROCESS:

Registration is required for participating to this course. Number of seats is limited to 40. Seats will be allocated first come first served basis.

Selected candidates will be confirmed through Email.

Registration Deadline: **Nov 15, 2018.**
For registration contact: asim@iitp.ac.in

REGISTRATION FEE:

Faculties (TEQIP sponsored institutes):	-2500
Others:	-4000
Industry:	-6000

OVERVIEW OF THE COURSE

(9-11 December, 2018)

DAY 1

- 0930-1100** : Introduction to data science.
- 1130-1300** : Linear Regression.
- 1400-1530** : Classification, Logistic Regression.
- 1600-1730** : Hands on session using R.

DAY 2

- 0930-1100** : SVM, K nearest neighbor.
- 1130-1300** : Tree based method.
- 1400-1530** : Principal component analysis.
- 1600-1730** : Hands on session using R/Keras.

DAY 3

- 0930-1100** : Introduction to neural network.
- 1130-1300** : Backpropagation, optimization.
- 1400-1530** : Overview of CNN .
- 1600-1730** : Hands on session using Keras.