

# Introduction to Machine Learning, focussed on Applications in Biology

**Where:** *IISER-Pune*

**When:** *24th - 26th July 2019*

**Instructors:** *Dr. Pranay Goel (IISER-Pune)*  
*Dr. Leelavati Narlikar (NCL)*  
*Dr. Sudhakaran Prabakaran (IISER-Pune & University of Cambridge)*



#	Date	Time	Venue	Trainers
1	<b>Wed 24 July 2019</b>	<b>09:30 - 17:00</b>	IISER-Pune	<i>Machine learning and its applications in biomedical research, Data types and partitioning, Introduction to CARET, an R-based machine learning framework, Dimensionality Reduction, Review and questions</i>
2	<b>Thu 25 July 2019</b>	<b>09:30 - 17:00</b>	IISER-Pune	Support Vector Machines, Nearest Neighbours, Decision Trees and Random Forests, Use case applying the above methods, Review and questions
3	<b>Fri 26 July 2019</b>	<b>09:30 - 17:00</b>	IISER-Pune	Linear models, Linear and non linear logistic regression/ gaussian processes, Artificial Neural Networks, Use case applying the above methods, Review, questions and resources for further study

## Objectives

After this course you should be able to:

- Understand the concepts of machine learning.
- Understand the strengths and limitations of the various machine learning algorithms presented in this course.
- Select appropriate machine learning methods for your data.
- Perform machine learning in R

## Prerequisites

- R programming knowledge

## Registration deadline

30th June 2019

## Register at

<https://forms.gle/NBX3GZTJHU8yvmbA9>

## Contact

email:

[mlw2019.iiserpune@gmail.com](mailto:mlw2019.iiserpune@gmail.com)