AI1001: Introduction to Modern AI
Outline and Course Details

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Course Description

- Concepts of modelling, inference and learning
- Linear and nonlinear models
- Supervised and unsupervised learning
- Classification, regression and multi layer perceptions, SVMs
- State based models, Markov decision processes
- Games
- Bayesian networks
- Constraint satisfaction and logic
- Example applications

Class Timings and My Coordinates

- Class Timings: Tuesdays, Wednesdays and Fridays, 12:00 – 13:30
- During any given week, only two slots will be used; default option is Tuesdays and Wednesdays.
- Starting date: July 30th, ending date: August 28th; ten lectures in all.
- My coordinates: Room C403, Email: m.vidyasagar@iith.ac.in
- I will usually be available in my office between 11:00 and 12:00 on the days of the lectures; but it is better to send an email first to set up a meeting.

Aside from the Introduction, the course will be divided into four modules:

- Module 1: Historical Evolution of AI (1 Lecture)
- Module 2: Classical AI (1 Lecture)
- Deep Learning (5 Lectures)
- Reinforcement Learning (3 Lectures)

The number of lectures is only approximate and subject to change.

Course Material and Marking Scheme

- Course material will consist of .pdf files posted on my web site: www.iith.ac.in/∼m_vidyasagar/
- Each .pdf file will have links to reference material. You are urged to read the linked material.
- Marking scheme is still being worked out.

Questions?