

CSc 84020 Graphical Models
Professor Changhe Yuan
Thursdays, 9:30 – 11:30 am

Description: Probabilistic graphical models, especially Bayesian networks, offer a compact, intuitive, and efficient graphical representation of uncertain relationships among the variables in a domain and have proven their value in many disciplines, including machine or medical diagnosis, prognosis, bioinformatics, planning, user modeling, natural language processing, vision, robotics, data mining, fraud detection, and many others.

This course will familiarize you with the basics of graphical models and provide a foundation for applying graphical models to complex problems.

Topics include basic representations, exact inference, approximate inference, parameter learning, structure learning, and applications.