02477 Bayesian Machine Learning - Course plan

Revised January 28th, 2022

Week	Topic
1	Intro, basic concepts, Beta-Binomial model
2	Bayesian Linear Regression and marginal likelihoods
3	Bayesian Classification and Laplace approximations
4	Distributions on function space, Gaussian Processes
5	Generalized linear models, non-linear extensions
6	Generalization, decision theory, calibration
7	Monte Carlo & Markov Chain Monte Carlo methods
8	Convergence diagnostics for MCMC, change point detection
9	Variational inference, mixture models
10	Black-box variational inference
11	Stochastic optimization
12	Network models, stochatic block models, Chinese restaurant processes
13	Bayesian neural networks

The plan may be subject to change.