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# Final Project

 $\begin{array}{c} \text{CSE 515T} \\ \text{Writeup} \\ \text{November 30, 2019} \end{array}$ 

### 1 Visualization

### 2 Model Fitting

- 2.1 Branin function
- 2.1.1 Log Model Evidence
- 2.1.2 BIC score
- 2.2 Branin function after log transformation
- 2.2.1 Log Model Evidence
- 2.2.2 BIC Score
- 2.3 LDA
- 2.3.1 BIC Score
- 2.4 SVM
- 2.4.1 BIC Score

## 3 Bayesian Optimization

### 4 Bonus

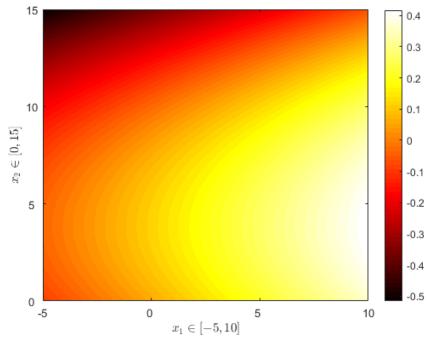


Figure 1-1: The model-marginal predictive mean function.

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