Statistical Rethinking Book Club, 2022

Tim Feeney

June-August 2022

Link to book for those that need it Scheduled Time: Thursdays $4 \mathrm{pm}\text{-}5 \mathrm{pm}$

Schedule:

Meeting		
date	Reading	Lectures
June 2	Chapters 1, 2 and 3	[1] The Golem of Prague (Slides)
		[2] Bayesian Inference (Slides)
June 9	Chapters 4 and 5	[3] Basic Regression (Slides)
		[4] Categories & Curves (Slides)
June 16	Chapters 5 and 6	[5] Elemental Confounds (Slides)
		[6] Good & Bad Controls (Slides)
June 23	Chapters 7, 8 and 9	[7] < Overfitting > < (Slides) > [8] < Markov chain Monte
		Carlo> <(Slides)>
June 30	Chapters 10 and 11	[9] < Logistic and Binomial GLMs> < (Slides)> [10]
		<sensitivity and="" glms="" poisson=""> <(Slides)></sensitivity>
July 7	Chapters 12 and 13	[11] <ordered categories=""> <(Slides)> [12] <multilevel< td=""></multilevel<></ordered>
		Models > < (Slides) >
July 14	Chapters 13 and 14	[13] <multi-multilevel models=""> <(Slides)> [14]</multi-multilevel>
, and the second	_	<correlated effects="" varying=""> <(Slides)></correlated>
July 21	Chapter 14	[15] <social networks=""> <(Slides)> [16] <gaussian< td=""></gaussian<></social>
v	•	Processes> <(Slides)>
July 28	Chapter 15	[17] < Measurement Error> < (Slides)> [18] < Missing
v	-	Data> <(Slides)>
Aug 4	Chapters 16 and 17	[19] <beyond glms=""> <(Slides)> [20] <horoscopes></horoscopes></beyond>
-	-	<(Slides)>

Date	Topic	Chapter	Problems	Youtube link
June 2	Introduction	1: Golem of Prague	HW 1 Solns Solns code	Lec 1
June 9	Bayesian Inference:Possibilities	2: Small Worlds and Large Worlds	HW 2 Solns Solns Code	Lec 2
June 16	Bayesian Inference: Sampling	3: Sampling the Imaginary		
June 23	Modelling	4: Geocentric Models		Lec 3
June 30	Variable Selection and Confounding	5: The Many Variables and the Spurious Waffles & 6: The Haunted DAG and The Causal		Lec 4 Lec 5 Lec 6 Lec 7
		Terror		

Date	Topic	Chapter	Problems	Youtube link
July 7	Model Building:	7: Ulysses' Compass		[Lec 3]
	Parameterization			
July	Model Building: Interaction	8: Conditional Manatees		[Lec 3]
14	Terms			
July	MCMC	9: Markov Chain Monte Carlo		Lec 8
21				
July	GLMs	10: Big Entropy and The GLM		Lec 9
28		J 24		
Aug 4	Extensions of the GLM	11: God Spiked the Integers		$Lec\ 10\ Lec\ 11$