

Bayes Resources (Apr 2023)

programs

BUGS/WinBUGS /OpenBUGS
jags/rjags/r2jags
Stan/rstan/rstanarm

Tutorial/demo programs:

https://utrecht-university.shinyapps.io/bayesian_estimation/
FBI: First Bayesian Inference (van de Schoot)

http://shiny.calpoly.sh/Prob_View/
probability distributions

video series

OxEd (Ben Lambert's first course):

<https://m.youtube.com/playlist?list=PLFDbGp5YzjqXQ4oE4w9GVWdiokWB9gEpm>

Ben Lambert's YouTube channel

<https://www.youtube.com/channel/UC3tFZR3eL1bDY8CqZDOQh-w>

See also his book "Student's guide to Bayesian statistics"

Draper eBay/Google short (60 hours!) course

<https://users.soe.ucsc.edu/~draper/eBay-Google-2013.html>

Written supplements no longer available; just video

Duke Univ coursera: (David Banks, Merlise Clyde, ...)

(just search for this; not available as web page)

Rasmus Baath

https://m.youtube.com/watch?v=3OJEae7Qb_o

(first of 3 videos)

Very entertaining; gets a lot into about an hour

<http://www.sumsar.net/> His main web site

<https://m.youtube.com/playlist?list=PLjWSgPmViK-MdyGoghJ9xqOH-2yvftsjF>

Ed Boone @ VCU; 50 videos

<https://m.youtube.com/watch?v=ERjV-xUI5Sw>
Herb Lee UCSC (Coursera)

<https://www.coursera.org/lecture/mcmc-bayesian-statistics/components-of-bayesian-models-jSkex>
Matt Heiner UCSC (Coursera)

https://m.youtube.com/channel/UCNJK6_DZvcMqNSzQdEkzvzA/playlists
McElreath, Statistical rethinking book

<https://m.youtube.com/playlist?list=PLBqnAso5Dy7O0IVoVn2b-WtetXQk5CDk6>
Aki Vehtari, BDA (follows the book, which he coauthored)

<https://vimeo.com/127855826>
David Kaplan

<https://m.youtube.com/playlist?list=PLFHD4aOUZFp0Xhzd5j1nWnExD54xJfnJX>
Jared Niemi, ISU course lectures

<https://m.youtube.com/@JingchenMonikaHu/playlists>
Monika Hu (Vassar) course videos; see also her book with Jim Albert

Books and articles:

A primer on Bayesian statistics in health economics and outcomes research

<http://gemini-grp.com/Bayes/OHaganPrimer.pdf>

A surprisingly nontechnical explanation by one of the most respected Bayesians (he wrote the Bayesian volume of Kendall and Stuart's Advanced Theory of Statistics)

http://www.stat.columbia.edu/~gelman/research/published/43586_2020_1_Author.pdf
van de Schoot, R., Depaoli, S., King, R. et al. Bayesian statistics and modelling. Nat Rev Methods Primers 1, 1 (2021). <https://doi.org/10.1038/s43586-020-00001-2>

https://pure.uvt.nl/ws/portalfiles/portal/1568043/DevPsy_Denissen_gentjle_CD_2014.pdf
Van de Schoot, R., Kaplan, D., Denissen, J., Asendorpf, J. B., Neyer, F. J., & Aken, M. A. (2014). A gentle introduction to Bayesian analysis: applications to developmental research. Child development, 85(3), 842-860.

Ben Lambert, "Student's guide to Bayesian statistics"
(based on the video series)

<https://bayesball.github.io/BOOK/probability-a-measurement-of-uncertainty.html>
Albert and Hu

<https://statswithr.github.io/book/>
Banks, Clyde, et al
book to accompany their Coursera course

https://bookdown.org/kevin_davisross/bayesian-reasoning-and-methods/

Think Bayes: Bayesian statistics made simple
<https://open.umn.edu/opentextbooks/textbooks/288>
2nd Ed is online: <http://allendowney.github.io/ThinkBayes2/chap01.html>

Bayesian data analysis (authoritative source on Bayesian methods)
<http://www.stat.columbia.edu/~gelman/book/>
book pdf and teaching resources

Kruschke, Doing Bayesian data analysis 2e
https://nyu-cdsc.github.io/learningr/assets/kruschke_bayesian_in_R.pdf