

## USE OF INTERACTIVE APPS IN TEACHING BAYESIAN STATISTICS

Haydar Demirhan, RMIT University, Australia

James Baglin, RMIT University, Australia

haydar.demirhan@rmit.edu.au

Use of statistical software is essential to the teaching and learning of Bayesian statistics. Effective use of statistical technologies, which help transcend the static pages of a textbook, have a great potential to make Bayesian theory and concepts more accessible through effective, dynamic, and interactive visualisation. This poster will present the development of specialised apps for teaching Bayesian statistics using Shiny, an open source web application framework for R. The apps were designed to dynamically visualise key Bayesian concepts covered in a first course. The apps allowed the instructor to develop students' understanding through experimentation, whereby the instructor or students could vary input parameters (e.g. alter a prior distribution) and visualise the resulting effect (e.g. posterior distribution).