



## 23<sup>rd</sup> SCHOOL OF BIOMETRICS



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Diana Šimić is a full professor of statistics and research methods in information sciences at the Faculty of Organization and Informatics University of Zagreb, and the Chair of the Postgraduate doctoral study program Information Sciences. She also teaches statistics at the postgraduate doctoral study program of Biomedicine at the School of Medicine University of Zagreb. She participated in 23 research projects, supervised four doctoral candidates; (co)authored more than 60 research papers, 11 books, and four book chapters. She was an invited lecturer at more than 20 conferences. She is a member of the Croatian Biometric Society, Croatian Statistical Association, Croatian Information Technology Association, Croatian Society for Medical Informatics, American Statistical Association (ASA), and Association for Computing Machinery (ACM). She serves as the vice president on the Boards of the Croatian Biometric Society and the Croatian Information Technology Association.

Topic:

## Using Shiny Apps in Teaching Statistics

### Abstract:

If picture is worth a thousand words, what's the worth of a moving picture? When teaching statistics, it is often easier to explain statistical concepts using simulation and visualization. Luckily, you can find many free interactive apps illustrating statistical concepts and procedures on the Internet. Still, there are many occasions when you would like to create your own app. Maybe your students do not speak English very well, or you would like to use your own data or example in the simulation, or you would just like to tweak one little aspect of the app to better suit your purpose. If you know basics of R and RStudio, and are familiar with ggplot2, you can easily create your own apps, which you can share with your students as files to be run in RStudio, or upload to a remote server and make accessible as web apps.

In this School of Biometrics, we will cover the basics of the rmarkdown and shiny packages, and show how to create and share your own stat app.

To participate actively in the school, you will have to install R and RStudio on your laptop. You will also have to install some R packages. All the school materials, including instructions, slides, examples, and assignments will be available at the github repository <https://github.com/disimic/biostat2021>.