Statistička analiza podataka: Popis literature za učenje

UNIZG FER, ak. god. 2020./2021.

Predavanje 1: Uvod u statističku analizu podataka

- Benšić, Šuvak. *Primijenjena statistika*, Poglavlja 1 i 2
- Walpole et al. Probability & Statistics for Engineers & Scientists, Poglavlja 1.1 i 1.2
- Diez et al. OpenIntro Statistics, Poglavlja 1.2, 1.3 i 1.4.1

Predavanje 2: Deskriptivna statistika

- Benšić, Šuvak. Primijenjena statistika, Poglavlje 3
- Walpole et al. Probability & Statistics for Engineers & Scientists, Poglavlja 1.3–1.6
- Diez et al. OpenIntro Statistics, Poglavlje 1.6

Predavanje 3: Uvod u statističko zaključivanje

- \bullet Walpole et al. Probability & Statistics for Engineers & Scientists, Poglavlja 8.1–8.7, 9.1–9.12
- N. Elezović. Slučajne varijable, Poglavlje 7.3
- N. Elezović. Statistika i procesi, str. 72 i 73
- Harvard Statistics 110, Predavanje 29: Law of Large Numbers and Central Limit Theorem (cijelo predavanje). https://www.youtube.com/watch?v=OprNqnHsVIA
- Harvard Statistics 110, Predavanje 30: Chi-Square, Student-t, Multivariate Normal (prvih 25 minuta). https://www.youtube.com/watch?v=MF-XSJOsGqw

Predavanje 4: Testiranje statističkih hipoteza

- Benšić, Šuvak. *Primijenjena statistika*, Poglavlja 5.4 i 5.4.1
- Walpole et al. Probability & Statistics for Engineers & Scientists, Poglavlja 10.1–10.3
- Diez et al. OpenIntro Statistics, Poglavlje 4.3

Savjet: pročitati cijelo 4. poglavlje koje pokriva 3. i 4. predavanje.

Predavanje 5: Statističko zaključivanje za metričke podatke

- Walpole et al. Probability & Statistics for Engineers & Scientists, Poglavlja 9.13, 10.4–10.7 i 10.10
- Barttlet's test. http://www.itl.nist.gov/div898/handbook/eda/section3/eda357. htm

Predavanje 6: Statističko zaključivanje za kategorijske podatke

- Walpole et al. Probability & Statistics for Engineers & Scientists, Poglavlja 10.8, 10.9 i 10.11–10.13
- Hodges et al. Basic Concepts of Probability and Statistics, Poglavlje 12.2

Predavanje 7: Postupci ponovnog uzorkovanja

- B. Efron & G. Gong (1983). A leisurely look at the bootstrap, the jackknife, and cross-validation. The American Statistician, 37(1), 36-48. http://www.sas.rochester.edu/psc/clarke/405/EfronGong.pdf
- Avery I. McIntosh. *The Jackknife Estimation Method.* http://people.bu.edu/aimcinto/jackknife.pdf
- S. Sawyer. Resampling Data: Using a Statistical Jackknife. http://www.math.wustl.edu/~sawyer/handouts/Jackknife.pdf
- K. Singh & M. Xie. Bootstrap: A Statistical Method. http://stat.rutgers.edu/home/mxie/RCPapers/bootstrap.pdf
- J. Canny. Lecture 11. https://inst.eecs.berkeley.edu/~cs174/sp08/lecs/lec11/lec11.pdf
- D. C. Howell. Overview of Randomization Tests. https://tinyurl.com/ycodpo2r

Predavanja 8 i 9: Linearna regresija

- Walpole et al. Probability & Statistics for Engineers & Scientists, Poglavlja 11 i 12.1–12.6
- Wikipedia. Standardized residuals. https://en.wikipedia.org/wiki/Studentized_residual

Predavanje 10: Regresija – binarna zavisna varijabla

- G. Rodriguez Logit Models for Binary Data. http://data.princeton.edu/wws509/notes/c3.pdf
- Walpole et al. Probability & Statistics for Engineers & Scientists, Poglavlja 12.8 i 12.9

Predavanje 11: Analiza varijance – ANOVA

• Walpole et al. Probability & Statistics for Engineers & Scientists, Poglavlja 13.1–13.5, 14.1–14.3

Predavanje 12: Neparametarski postupci

• Walpole et al. Probability & Statistics for Engineers & Scientists, Poglavlja 16.1–16.4, 16.7

Predavanje 13: Alternativni pristupi analizi podataka

- Walpole et al. Probability & Statistics for Engineers & Scientists, Poglavlja 18.1 i 18.2
- P. Ipeirotis. Are you a Bayesian or a Frequentist? (Or Bayesian Statistics 101). https://tinyurl.com/cuyvfka