Mahmood Taghavi homepage at GitHub

I am a biostatistician with interests in statistics, epidemiology, and computer science. Please feel free to visit my LinkedIn profile for general information about me or see my Google Scholar profile for the full list of my scientific publications.
However, this page is dedicated to my open source projects (scientific projects and also assistive technologies that I developed in my spare time) which were written in R, R Shiny, Matlab, Python, and C# dot Net programming languages.

Scientific projects

- Ridit is a package for Ridit analysis in **R** statistical environment. It is also available from CRAN (The Comprehensive R Archive Network).
- FLUR is an interactive **R Shiny** web app that is designed to present the result of a functional regression model for spatial prediction of airborne particulate matter diurnal variation curves in the mega-city of Tehran. This app is now online at https://mahmood-taghavi.shinyapps.io/flur/.
- d-stem-LUR is the data and **Matlab** codes repository for one of my papers entitled "Concurrent spatiotemporal daily land use regression modeling and missing data imputation of fine particulate matter using distributed space-time expectation maximization" which is appeared in the Atmospheric Environment journal (IF = 4.012).

Assistive technologies

- Dual Voice for NVDA is an open source software developed in **Python** programming language which adds support for multilingual speech to a famous screen reader software namely NVDA (screen readers are software which let blind and visually impaired users to interact with their computers).
- SAPI_Unifier is an open source software developed in **C# dot Net** to Unify installed Microsoft OneCore voices and Microsoft Speech Server voices with Microsoft Speech API version 5 (SAPI 5) in Windows. So visually impaired users can use and enjoy all of them as standard SAPI 5 voices.
- eSpeakPlus is a collection of espeak Text To Speech (TTS) engine for Windows, Mbrola speech synthesis library, some of Mbrola voices (ir1; de6; de7; en1; us1; us2; us3), and the NVDA defined voice variants including the famous "max". This suite supports Persian and other languages and has the standard SAPI 5 speech driver. It also contains **phonetic translation** files for two Mbrola diphone voices namely de6 and de7 which make enable espeak TTS to read Persian and English text using the aforementioned German voices.