Mahmood Taghavi homepage at GitHub

I am a biostatistician with interests in statistics, epidemiology, and computer science. Please feel free to visit <u>my LinkedIn profile</u> for general information about me or see my <u>Google Scholar profile</u> 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

- <u>Ridit</u> is a package for Ridit analysis in **R** statistical environment. It is also available from <u>CRAN</u> (The Comprehensive R Archive Network).
- <u>FLUR</u> 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.
- <u>d-stem-LUR</u> 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 <u>Atmospheric Environment journal (IF = 4.012</u>).

Assistive technologies

- <u>Dual Voice for NVDA</u> 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).
- <u>SAPI Unifier</u> 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.
- <u>eSpeakPlus</u> 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.