The report has to have the following sections:

Abstract, a clear introduction and description of methods, examples and applications, brief conclusions, and references. No more than 7pages are allowed. An extra 3 pages are allowed for including the code (can be double-column if needed). Two choices are possible for the applications and example

Implement the method(s)yourself; test on examples; compare with other methods and/or exact solutions (using the programming language of your choice)and comment of advantages/disadvantages compared with other methods.

Use software packages (Matlab, Mathematica, Maple, etc.) To build more complex applications that provide solutions for a specific applied problem of your choice.

In signal processing, waves are an oscillating function defined in time and space, such as sinusoids. Within the same context, wavelets can be interpreted as a small wave with its energy concentrated in a position in time. These wavelets are mostly used in signal analysis to decompose and filter time signals. Wavelets are often compared to Fourier

are a method of signal decomposition that . are used to filtrate data time signals in a more general way than Fourier transforms, .