

Literate programming and dynamic generation of reports

Literate programming and literate data analysis are efficient ways to produce documented computer programs and dynamic reports. This paper examines the gradient between Knuth's literate programming (generating a program and handbook), source code with markup (program and API reference), dynamic handbook (user manual with tested examples), and literate data analysis (document with underlying code). Today, scientific journal editors are encouraging authors to submit manuscripts supplemented with literate data analyses, in order to make scientific analyses reproducible.