Computing Versal Deformations

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Abstract

In recent years I have computed versal deformations of various singularities, partly by hand, but mostly with the program Macaulay. I explain here how to do these computations. As an application I discuss the smoothability of a certain curve singularity, a case I had not been to settle with general methods. As a result I find an example of a reduced curve singularity with several smoothing components.