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Abstract

The importance of engineering simulation is increasing day by day with the increase of computing power. The finite element analysis method is one of the widely used approaches for this purpose. To achieve optimum simulation, there is no alternative to take complete control over the code which proprietary commercial codes fail to offer. This paper focuses on the review of the development of a finite element analysis framework using freely available python libraries and wrapping legacy C/C++ or Fortran libraries around python; and its verification as a viable finite element solution with an example of concrete tensile strength test simulation.

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Index Terms

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Keywords

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