

Accepted Manuscript

A hybrid self-adaptive conjugate first order reliability method for robust structural reliability analysis

Behrooz Keshtegar , Subrata Chakraborty

PII: S0307-904X(17)30568-1
DOI: [10.1016/j.apm.2017.09.017](https://doi.org/10.1016/j.apm.2017.09.017)
Reference: APM 11962



To appear in: *Applied Mathematical Modelling*

Received date: 9 March 2017
Revised date: 1 September 2017
Accepted date: 6 September 2017

Please cite this article as: Behrooz Keshtegar , Subrata Chakraborty , A hybrid self-adaptive conjugate first order reliability method for robust structural reliability analysis, *Applied Mathematical Modelling* (2017), doi: [10.1016/j.apm.2017.09.017](https://doi.org/10.1016/j.apm.2017.09.017)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- First order reliability method (FORM) is improved using conjugate search direction.
- Two conjugate methods are proposed using self-adaptive (SAC) and hybrid self-adaptive (HSAC) conjugate formula.
- The SAC and HSAC are adaptively computed using the FR conjugate method in order to satisfy the sufficient descent condition.
- Efficiency and robustness of SAC and HSAC are tested using seven reliability problems.
- Proposed SAC and HSAC methods are shown the remarkable efficiency and robustness compared to the existing FORM formula.

ACCEPTED MANUSCRIPT

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات