## **Accepted Manuscript**

A Two-Phase Software Reliability Modeling Involving with Software Fault Dependency and Imperfect Fault Removal

Mengmeng Zhu, Hoang Pham

PII: \$1477-8424(17)30159-8 DOI: 10.1016/j.cl.2017.12.002

Reference: COMLAN 280

To appear in: Computer Languages, Systems & Structures

Received date: 8 October 2017
Revised date: 11 December 2017
Accepted date: 21 December 2017



Please cite this article as: Mengmeng Zhu, Hoang Pham, A Two-Phase Software Reliability Modeling Involving with Software Fault Dependency and Imperfect Fault Removal, *Computer Languages, Systems & Structures* (2017), doi: 10.1016/j.cl.2017.12.002

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.

#### ACCEPTED MANUSCRIPT

#### Highlights

- Incorporate software fault dependency in NHPP (Non-homogeneous Poisson process) software reliability model.
- Incorporate imperfect fault removal for the realistic consideration.
- Propose two types of software faults, Type I (independent) fault and Type II (dependent) fault. Accordingly, two phases, Phase I and Phase II debugging process are proposed based on different fault type.
- The illustration of the model effectiveness is based on three datasets collected from industries. All three datasets demonstrate the proposed model has the best performance.

### Download English Version:

# https://daneshyari.com/en/article/6870890

Download Persian Version:

https://daneshyari.com/article/6870890

<u>Daneshyari.com</u>