

Accepted Manuscript

Title: A multi-objective evolutionary algorithm based on Pareto prediction for automatic test task scheduling problems

Authors: Hui Lu, Rongrong Zhou, Zongming Fei, Jinhua Shi

PII: S1568-4946(18)30109-1

DOI: <https://doi.org/10.1016/j.asoc.2018.02.050>

Reference: ASOC 4742

To appear in: *Applied Soft Computing*

Received date: 3-7-2017

Revised date: 2-1-2018

Accepted date: 26-2-2018



Please cite this article as: Hui Lu, Rongrong Zhou, Zongming Fei, Jinhua Shi, A multi-objective evolutionary algorithm based on Pareto prediction for automatic test task scheduling problems, Applied Soft Computing Journal <https://doi.org/10.1016/j.asoc.2018.02.050>

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.

A multi-objective evolutionary algorithm based on Pareto prediction for automatic test task scheduling problems

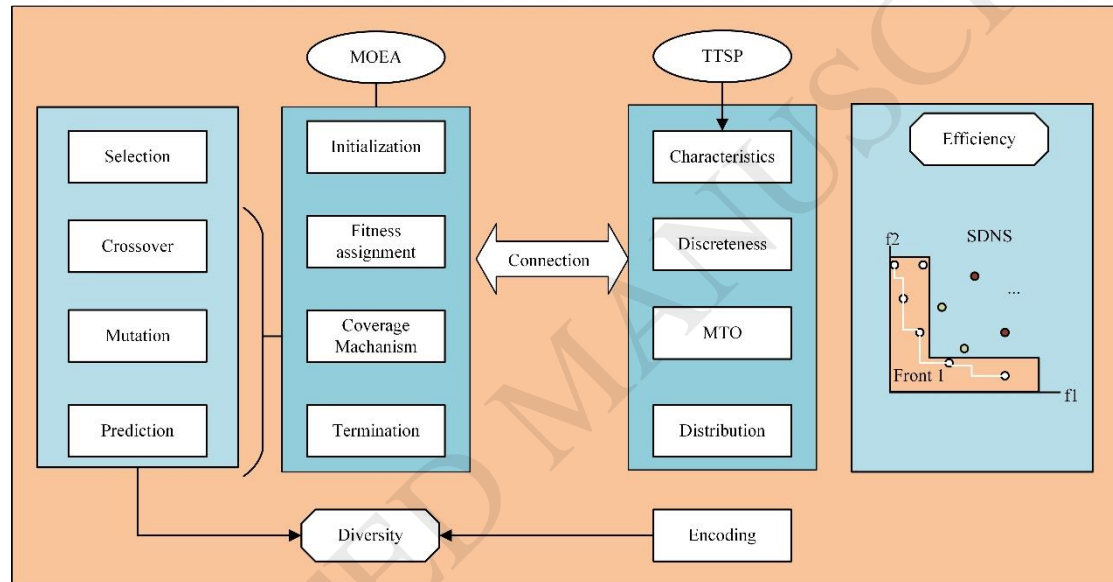
Hui Lu^{a,*}, Rongrong Zhou^a, Zongming Fei^b, Jinhua Shi^a

^aSchool of Electronic and Information Engineering, Beihang University, Beijing 100191, P.R.China

^bDepartment of Computer Science, University of Kentucky, Lexington, KY 40506-0495, USA

mluhui@vip.163.com

Graphical abstract



Research Highlights:

- A multi-objective evolutionary algorithm based on Pareto prediction is proposed fully considering the characteristics of the test task scheduling problem.
- A pure elitism mechanism and a fast non-dominated sorting based on scale-down (SDNS) method are proposed to improve efficiency and provide more opportunities to explore better solutions.
- An effective encoding scheme with different ranges for different scale instances is researched to greatly improve the diversity of newborn population.
- A Pareto predictive strategy is proposed to fully utilize historical information.

Abstract

The test task scheduling problem (TTSP) is a combinatorial optimization problem still under

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