

Test Scheduling Case Study

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Constraint Based Production Scheduling

Acknowledgments

This publication was developed as part of the ENTIRE EDIH project, which received funding from Enterprise Ireland and the European Commission.

Part of this work is based on research conducted with the financial support of Science Foundation Ireland under Grant number 12/RC/2289-P2 at Insight the SFI Research Centre for Data Analytics at UCC, which is co-funded under the European Regional Development Fund.

Part of this work is based on research conducted within the ASSISTANT European project, under the framework program Horizon 2020, ICT-38-2020, Artificial intelligence for manufacturing, grant agreement number 101000165.

Key Points

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Problem Description

The problem arises in the context of a testing facility. A number of tests have to be performed in minimal time. Each test has a given duration and needs to run on one machine. While the test is running on a machine, no other test can use that machine. Some tests can only be assigned to a subset of the machines, for others you can use any available machine. For some tests, additional, possibly more than one, global resources are needed. While those resources are used for a test, no other test can use the resource. The objective is to finish the set of all tests as quickly as possible, i.e. all start times should be non-negative, and makespan should be minimized.

Feature Overview

Summary

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