CHAPTER 29

MATHEMATICAL SCIENCES
OPERATIONAL RESEARCH

Doctoral Theses

231. GUPTA (Amit)
Some New Models in Software Reliability and Optimization
Supervisor : Prof. P K Kapur
Th 14253

Abstract

Endeavores to develop more practical software reliability growth models catering to different development environment. Optimization models and solution methods have also been proposed. Form management problem occurring during the testing phase of software development life cycle. Three new SRGMs have been proposed for software developed under distributed development environment. The problem of allocating resources to each module during testing was discussed. For this purpose a new SRGM with testing effort was proposed the very pertinent software release time problem was discussed. For fixing reliability requirement and budgetary constraints, management may not be in a position to provide precise targets or goals the discrete SRGMs have been quite elaborately discussed. Different apporaches for development of flexible models have been brough out.

Contents

1. Introduction. 2. Reliability Modeling for Software Development Under Distributed Development Environment. 3. Allocation and Control of Testing Resource in a Modular Software. 4. Managing the Testing Phase of Software Development Life Cycle. 5. On Discrete Software Reliability Growth Models. 6. Conclusion and Scope for Further Research. Bibliography.

M.Phil Dissertations

232. AGGARWAL (Rashmi)
Discrete Software Reliability Growth Models.
Supervisor : Prof. P K Kapur

233. CHADHA (Deepti)
A Study of User-Oriented Software Quality.
Supervisor : Dr. A K Bardhan

234. GUPTA (Amit)
Some New Models in Software Reliability and Optimization.
Supervisor : Prof. P K Kapur

235. GUPTA (Anshu)
A Study in Marketing and its Interface with Software Reliability.
Supervisor : Prof. P K Kapur

236. JAIN (Ruchi)
Price Change Anticipation Problems and Inventory Management.
Supervisor : Dr. C K Jaggi

237. JHANB (Tina)
A Critical Review of Some Models Based on Survival Analysis.
Supervisor : Dr. Gurprit Grover

238. KALRA (Anu)
Inventory Management of Items with Stock Dependent Demand.
Supervisor : Dr. C K Jaggi

239. PRASAD (Archana)
On Recent Developments in Software Reliability Growth Modeling.
Supervisor : Prof. P K Kapur

240. RAWAT (Anjali) nee Anjali Budhraja
A Critical Review of Some Models on HIV / AIDS Epidemic.
Supervisor : Dr. Gurprit Grover

241. SHARMA (Ekta)
Inventory Managment of Items with Trade Credit Policies.
Supervisor : Dr. Chandra K Jaggi