

A Novel Way to Improve Software Quality Using Data-Mining Techniques

Dr. Amitava Bondyopadhyay



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**Assistant Professor & Head
Department of Computer Science
Mankar College**



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*Dedicated
To
All My Teachers
Whose Supreme Art Have Awakened
Joy In Creative Expression And Knowledge.*

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Preface

In this book, entitled, “***A Novel Way to Improve Software Quality Using Data-Mining Techniques***”, I have made a sincere effort to find a way to improve software quality. Previously, various data mining techniques is planned for defect prediction in the earlier period, but only some of them manage to deal effectively with all of the above issues. For example Regression models estimates are very hard to interpret and predicting the actual number of defects is very uncertain, particularly at the beginning when very small information is available. We have also become aware of the fact that classification models that predict probable faultiness can be very accurate. But it is unable to assure us about the actual number of faults. Researchers in the earlier period used many methods with diverse dataset to predict defects. But in today’s world a large number of classifications algorithms available. We require to choose the best possible one. All those issues motivates me to write this book in the field of software defect prediction.

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--- Amitava Bondyopadhyay