

PREFACE

Software Engineering is not just surveys of techniques and terminology; it includes techniques that students must master. This book is designed for college students taking courses in software engineering at the undergraduate and graduate level. During my 25+ years of teaching software engineering at both the undergraduate and graduate level, I have realized the need for solved examples and for guidance to help students with these techniques.

This book is intended to be used in conjunction with a textbook or lecture notes on software engineering. The background and motivation for diagrams, notations and techniques are not included. Included are rules about proper construction of diagrams. Instructions on using techniques are given. Rules are included about applying techniques. Most important, examples and solved problems are given for diagrams, notations, and techniques.

Writing this book was not a solitary effort. Many people have influenced this book. In particular, I wish to acknowledge the following: Karen, my wonderful wife, for all of her support and help in creating this book. Without her help, this book would not have been done. Steve, who took time from his PhD studies to critique many of the chapters. My students, who provided the original inspiration for writing this material and who have read these chapters as individual readings, have found mistakes, and have offered suggestions. I would like to thank Ramon, who suggested this book, and the McGraw-Hill editorial staff for their help and suggestions.

DAVID A. GUSTAFSON